

THE ROLE OF SYNTACTICAL REDUNDANCY IN THE EVOLUTION
OF LANGUAGE WITH SPECIAL REFERENCE TO EARLY ENGLISH

CENTRE FOR NEWFOUNDLAND STUDIES

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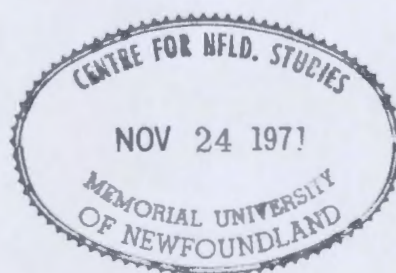
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IN THE EVOLUTION OF LANGUAGE WITH

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A B S T R A C T

In this work a functional approach has been adopted toward language change. An attempt has been made to give reasons why some changes in a language occur.

The tool of the analysis is the notion of syntactic redundancy. Syntactic redundancy exists when grammatical notions are expressed by different systems simultaneously, e.g. by case and word-order, etc. It has been postulated that more changes will take place in syntactically redundant environments than in syntactically unredundant environments.

The material chosen to test the hypothesis is a series of Old and early Middle English texts. English used to have a fairly full system of case inflections to mark grammatical notions, which has given way to the present word-order system. Thus, at some period there must have been a transition stage, where both case and word-order systems were operating to mark grammatical notions, and it is during this period that syntactic redundancy would exist. To prove this, 8 texts were chosen that covered the period 895 A.D. to 1230 A.D. It was during the latter half of this period that the case system began disappearing from English. The two earliest texts showed very little evidence of case-loss. All the texts were subjected to (a) a word-order analysis and (b) an analysis of the forms that had lost distinctive case with respect to their environments, in order to see if case-loss was greater in the unmarked environments or not.

The results showed that OE word-order was not as flexible as has been thought, and that the disappearance of the case system had little effect on the word-order of the texts without distinctive case. Some evidence was found to support the hypothesis, but not enough information was collected to prove it conclusively.

CHAPTER 1

Historical linguistics has alternately been in and out of favour with linguists over the course of the last century or so. Initially in Europe historical linguistics was more or less the only type of linguistics, starting with the famous discoveries concerning the relationships between European languages and those of Northern India. The impetus given to further study by these discoveries resulted in almost 100 years of research (from around the end of the 18th century until the end of the 19th century) devoted largely to the formulation of sound-laws and typologies. The early part of the 19th century was of course characterized by the works of the early comparatists. Franz Bopp published in 1816 the result of his studies into the Persian, Indian, Arabic and Hebrew languages, which was entitled "Über das Conjugationssystem der Sanskritsprache in Vergleichung mit jenem der Griechischen, Lateinischen, Persischen und Germanischen Sprache", in which the correspondences between Sanskrit and the languages of Europe were first clearly presented. In this connection Rasmus Rask's first work, "Researches into the origin of the Old Norse or Icelandic language, (1818)", must be mentioned, since in this work Rask arrived independently at the same conclusions as Bopp had done two years earlier.

Jacob Grimm, although not the first to notice the correspondences between the obstruent systems of Indo-European and Germanic, is generally given credit for the "law" that states these correspondences or shifts. The discovery of these shifts was important because it laid down a pattern for the future descriptions of similar shifts and indicated the type of regularity to be expected. Thus the early part of the last century saw

the rise of comparative linguistics, the aims of which, although often misguided, provided linguists with a vast quantity of information.

The Neo-grammarian school, based on the works of Osthoff, Leskien and Brugmanⁿ, considered the phonological correspondences between related languages as absolutely regular and exceptionless and termed these correspondences "laws" which, subject to identifiable exceptions, applied throughout the languages involved. Verner's and Grassmann's laws finally explained two apparent exceptions to Grimm's law and gave this school of linguistics a wide currency in Europe.

It was Ferdinand de Saussure who first introduced the notion that the study of language did not necessarily have to be historical in aspect, when he proposed the terms diachrony and synchrony. Perhaps it was from this point onwards that interest in historical linguistics gave way disproportionately to synchronic studies, and linguists, especially in North America, began to realize that interesting material was to be found on home ground and not only in Sanskrit texts. Boas and Sapir pioneered "practical" linguistics in the States, where the anthropologist's need to know something about the language of the group he was studying became part of the new science of linguistics. This is not to say that historical linguistics was ignored after the beginning of this century; Sapir included roughly 80 pages of historical studies in his "Language", and Bloomfield devoted roughly 200 pages to the subject in his "Language".

However, in spite of these efforts and many individual breakthroughs in historical linguistics, little was contributed to the overall general theory of change in the first half of this century, unless one wishes to consider Swadesh's and Lees' theory of glottochronology or Trudgill's work on change by phonemes as major advances in theory. Recently whole new approaches have been attempted. Initially the pioneering works of Weinreich (Languages in Contact, 1953), Martinet (Économie des Changements Phonétiques, 1955) were highly individualistic and isolated, and in both cases not really followed up. Within the last few years however a noticeably more coherent approach has been adopted. King (Historical Linguistics and Transformational Grammar, 1968) has chosen the transformationalist base to render a syntactically oriented method of describing change. Closs (1965) and Klima (1965) were essentially the first to tackle the mechanisms of change in this way. The publication of "Directions for Historical Linguistics" (1968), a symposium on a great many aspects of historicism, is an encouraging trend which seems to have emerged from two or possibly three approaches to language change. The first is exemplified by the work of Labov. His studies, notably on the /r/ phoneme in various New York City dialects, entail great attention to parameters of age, class, colour and sex on a scale hitherto unknown in linguistics, (The Social Stratification of English in New York City). Various minute differences in pronunciation are correlated to these parameters, and patterns of change emerge according to these parameters, thus giving an insight into some of the causes of change.

"The change is a shift in the phonetic position of the first elements in the diphthongs /ai/ and /au/ and the community is

the island of Martha's Vineyard, Massachussets. By studying the frequency and distribution of phonetic variants of /ai/ and /au/ in the several regions, age levels, occupational groups and ethnic groups within the island, it will be possible to reconstruct the recent history of this sound change; by correlating the complex linguistic pattern with parallel differences in social structure, it will be possible to isolate the social factors which bear directly on the linguistic process." (Word, 1963, p. 273)

Labov's work goes beyond mere dialect information. It is a detailed structural study of linguistic variation in the community.

A somewhat similar approach to linguistic evolution is characterized by the study of children's speech habits. This study is by no means new and in fact, Hermann Paul (1880) considered the transmission of language to new speakers as the chief cause of change. Paul Passy (1891, p. 231) and William Dwight Whitney (1883, pp. 34 - 35) also held that it was during the course of transmission of language that changes occurred. However, this approach has recently been refined and formalized by M. Halle (1962). Halle's main thesis is that adult speakers may only add a late rule to their grammars but cannot restructure their grammars, whereas children can. (Phonology in Generative Grammar, p. 345 in "The Structure of Language", eds. Katz and Fodor). It should be pointed out that the concept of language change here is the one stated by Postal in "On the Mentalistic Character of Sound Change", where he points out that changes occur in the grammar rather than in the phonology. Halle's point is that

adults may change the surface representations of their grammar without changing the underlying forms, but that children, on hearing only the surface representations and having no way of discovering their parents' underlying forms, automatically construct for themselves new underlying forms. Thus although an adult's and a child's language may be almost identical, they will have different deep structures. This theory is supported by the fact, that children are creative at early ages and can form previously unheard sentences and forms (R. King, p. 72) and apply certain rules to elements on which the rules of the adult language cannot operate, e.g. bringed thinked childs etc.

Basically then what children do in learning the language is to reconstruct their parents' grammar in the direction of greater simplicity. This simplification and optimization of the rules of the language by the child seems to be the most plausible idea put forward concerning causes for change. Of course, it must not be forgotten that language is an extremely complicated system of interrelated systems and that a rule simplified here might lead to a complication elsewhere. King (p. 86 - 87, 1968) gives a hypothetical example of this process of co-occurrent simplification and complication. "----- certain changes may secondarily complicate other parts of the grammar. Consider a hypothetical language with five underlying vowels / i e a o u / and the five underlying stops / p t k b d g /. Suppose there is a rule lengthening vowels before voiced obstruents, and assume that an innovation devoicing every /b d g/ is added at the end of the grammar. From underlying /bat/ and /bad/

the surface forms will be /bat/ and /ba:d/. The child exposed to these and like forms will only hear length as the distinguishing feature, and we may hypothesize that the child's grammar will have vowel length in underlying forms but nowhere /b d g/. This is a complication of the underlying vowel system, but it also represents the simplest grammar that can be constructed from the output of the adult grammar." King gives adult language and child language innovations as further reasons why languages are not maximally simple. ('Simple' - of course, depends on the evaluation procedure chosen).

Jespersen in his book "Efficiency in Linguistic Change", (1942) does not seem to have realized the above point concerning the double-sidedness of simplificational changes. His researches based to a large extent on the evolution of English make for rather post facto judgements on one aspect of the evolution of English, namely the case system. He does not seem to take into account the complicational factors that have arisen in English, e.g. the verb system. Of course, there is probably no causative link between the syncretism of English cases and the rising complications in the verbs, but it seems to be a widely held view by linguists that no language at any stage of its development is in toto more difficult to learn or to speak than at any other stage of its development. In toto must be emphasized here, because as anyone who has learnt a foreign language will know, some parts of that language will have presented few problems, whereas other parts will have presented many problems. Whether something is problematical or not will in part depend on the learner's linguistic background; however, Bever and Langendoen make much the same point. "A language in which there is greater variety of inflections than modern English, must be more diffi-

cult to learn, at least in that respect". (The Interaction of Speech Perception and Grammatical Structure in the Evolution of Language. P. 53).

Thus particular systems or representations of particular categories increase and decrease in simplicity over a period of time.

Comparatively speaking this language phenomenon is everywhere apparent, to the effect that relatively little attention need be paid to word order in Russian or Latin, whilst the same is not true for English or French. Conversely English verb conjugations present few problems, whilst those of Latin, French, German and Russian do.

If we return momentarily to the study of children's learning habits and the proposal that simplifcational tendencies are the actual causes of change, but that a simplification in one system may lead to complication in another, we are faced with the problem of how the child selects which system to simplify. Supposing the child is presented with the totality of language systems, we must suppose that there is a tendency to simplify them all, but somehow this does not happen. Thus we must incorporate into a theory the notion that simplification is a general trend extending over generations, and that each succeeding generation furthers the simplifications already in progress (and the complications presumably).

The third type of modern approach is to be found in many of Jespersen's works, where the author's concern with functionality as one of the main factors of change is obvious. Although he has not formulated as clear a theory as that of the transformationalists, many of his ideas are equivalent to those found in the most recent

works. For instance Jespersen rejects outright the idea that phonetic levelling was the only cause of case syncretism in English in his first publication "Progress in Language with Special Reference to English", (1894, p. 175).

"I have stated elsewhere my reasons for disbelieving in the axiom of the so-called young grammarian school of the blind working of sound laws and analogy sufficing between them to explain everything in linguistic development. Here I shall add, with regard to the special question concerning us in this chapter, that the young grammarians' view does not look deep enough in its search for explanations. If simplification of forms is to be attributed in the main to the phonetic law of unstressed terminations, what then is the cause of the phonetic law? And if, on the other hand, analogy has played an important part in this development, the question arises, if it is not possible to suggest causes why the principle of analogy should have thus asserted itself.

Let us for a moment suppose that each of the terminations -a, -e, -u, bore in Old English its own distinctive and sharply defined meaning, which was necessary to the right understanding of the sentences in which the terminations occurred. Would there in that case be any probability that a phonetic law tending to their levelling could ever succeed in establishing itself? Most certainly not; the all-important regard for intelligibility would have been sure to counteract any inclination towards a slurred pronunciation of terminations. Nor would there have been any occasion for new formations by analogy, as the endings were already sufficiently alike.

The above comparative survey of the declensions of Old and Modern English furnishes an answer to the questions proposed and makes the whole causality appear in a much clearer light than would be possible by any other arrangement of the grammatical facts; the cause of the decay of the Old English apparatus of declensions lay in its manifold incongruities."

This rather long quote from Jespersen is very similar in notion to Postal's view of sound change. Postal points out that it is not sounds that change but rather grammars, (1968, p. 270). Now obviously Jespersen did not use the deep/surface structure notion implicit in Postal's work, but he approaches the problem in the same manner from the systemic rather than from the particularistic angle, and it is this Jespersenian approach that will chiefly be developed here. This does not mean that the approaches to language change developed by Halle or Labov will in any way be rejected but rather that for the present purpose a macro-linguistic approach will be adopted. The works of Halle and Labov may be characterized in part by their attention to the minutiae in linguistic change; here the opposite will be attempted in that large sections of a language will be analysed with particular reference to certain meaning-significant devices over a long period at relatively close intervals, to see, if in fact causality of change may be determined on the syntactic level.

Of course, there are many other theories dealing with teleology in linguistic change, not mentioned in this short review. Istvan Fodor (The Rate of Linguistic Change, p. 12) gives a list of eleven factors and the authors chiefly associated with these factors.

CHAPTER 2

Functionality and Redundancy

The search for causal factors in linguistic change which the previous chapter led up to, has recently become a more respectable pursuit amongst linguists. It is natural that this search formerly attracted some derision because of the unscientific and simplistic approaches adopted. Undoubtedly it is a fascinating subject but unfortunately also a very discouraging one in view of the complexities. Jespersen probably devoted much of his attention to the problem of functional causality throughout his life; "Progress in Language" was first published in 1894 and "Efficiency in Linguistic Change" in 1942. Jespersen approached linguistic change from the point of view of the syntactic system rather than from the phonology, his view being that at some stage grammars require renovation in the direction of simplicity of expression. Linguists of the Prague School also stressed functionalism in phonology and syntax. A. Martinet extensively developed functional phonetics as a possible factor of change in his "Économie....." but devotes relatively little space to economy in the realm of syntax, (cf. A Functional View of Language) which is, however, in spite of its brevity an informative piece of writing on the subject.

The old view that language change is purely the result of phonetic attrition and of contact between speakers of different languages (cf. Henry Bradley, The Making of English, pp. 13 - 22) is now regarded as being too simple an explanation, although undoubtedly both are factors. In general, language contacts furnish a large number of

lexical items but by and large do not seem to alter the structures or word-formation devices. Creolization processes are a rather different case and will be discussed later. The change in meaning in the word hopefully is presumably due to the influence of German hoffentlich which is replacing the more cumbersome I hope (that). Whether of course, this loan-translation is regarded as a grammatical device or merely a lexical item is probably a moot point.

Since Martinet no linguists have contributed greatly to the functional view; however, Y. Malkiel has advocated functionalism in syntax. "After Martinet twelve years ago concluded his stimulating *Economie*..... one might have expected him to advance along at least one of the two roads conducive to beckoning goals (say, inflection or syntax) ..." (Directions for Historical Linguistics, p. 24). Malkiel himself has not followed his own advice, looking mainly at changes on the lexical level (e.g. "Hypercharacterization in Romance" in *Archivum Linguisticum*, vols. 9 and 10); however, as he points out (vol. 10, p. 35), the subject of hypercharacterization is an enormous one. "... diachronic hypercharacterization, ubiquitous and protean in its manifestations, tends to haunt the scholar who has become intimately acquainted with it and may induce him to discredit it by too frequent appeals to its agency. If handled without due caution.... the concept of excessive marking of a linguistic category may ultimately lose its usefulness."

The recognition of hypercharacterization is an important element in a functional syntax, and here an attempt will be made to define it and apply it to linguistic evolution, to see if systems that are highly redundant are more likely to disappear from the language than those that are not. In future this phenomenon of an "excessively marked" category will be termed redundancy.

Redundancy in language seems to be a much neglected feature in most texts. Everyone acknowledges its existence, but few are prepared to explore it. Probably this is because it has been found that the definition of redundancy in terms other than those of the communication's engineer is rather uncertain, whilst the communication's engineers's notion of redundancy is largely inapplicable to present linguistic theories. In mathematical terms redundancy consists of a range of possibilities from 0 to 1, where any item which is rated 1 on the scale of possibilities is completely redundant and hence without informative content. This follows from the fundamental principle of information theory that information content is inversely proportional to probability. However, this principle does not serve linguistics too well. For instance, what is the omitted item in the following sequence ? "Je ... dois pas". Every speaker of French will say ne , in which case in that specific environment ne has a probability of 1 and an information content of 0. But if we remove the pronoun and ask the same question, the replies will vary between je and tu (presuming that the respondent can see the question on a printed page), in which case the probability of je or

tu occurring is 50% and the redundancy is halved. However, is ne really lacking in information content; is it not simply part of the structure of the French negative and hence part of an important device that signals meaning? Uriel Weinreich (Trends in Linguistics, vol. 3. p.472) summarizes the problem. "The second stimulus for this work was the realisation that the information-theoretical doctrine "obligatory = meaningless" has been seriously misused in linguistics. The inverse proportion between redundancy and information applies only to elements of the signal, i.e. to the surface structure." Thus syntactically speaking ne is not redundant. However, it is interesting to note that ne is being omitted in colloquial French, e.g. / ʒe pa / for je ne sais pas. The restructuring of the negative is, however, also to be found in many languages beside French. In early English and German, for instance, the negative had much the same structure as in standard modern French, e.g. not.... a whit Thus it seems likely that explanations for this phenomenon must be sought on the notional rather than the syntactical level.

Martinet discards the mathematical approach (Functional View, p. 144). "But if the relationship between frequency and cost were of the same type as that between frequency and information, we should be able to state that for a given frequency a word should have n phonemes.... and that a word of n phonemes should definitely belong to a given frequency range. This is of course not the case; conspicuous with its four syllables and eleven phonemes is so much more frequent than dinosaur with three syllables and seven phonemes. We have here a clear

indication that a strictly mathematical treatment of the problems of language dynamics is not practicable." Admittedly Martinet's example of conspicuous v. dinosaur is not parallel to the status of ne, but all the same, mathematical formulations are still inapplicable.

In what way then can redundancy be specified so that it may serve usefully in linguistic description? In the first instance there are probably three types of redundancy, phonological, contextual-semantic and syntactic. Phonological redundancy, which shall not concern us here, has in fact been worked out and found to be pretty well invariable for all languages, namely 50% (Hockett in J. Greenberg *Universals of Language*, p. 24). Shannon (1951) attained much the same figure for printed English which might suggest that diachronically speaking 50% is the constant.

Semantic redundancy presents many problems. Basically the whole question of knowing something could be construed as redundancy. For instance, what is the omitted element in the following sentence? "Now is the winter of our ..." Most educated speakers of English will reply with discontent, but does this then mean that discontent in the above environment is redundant, just because a lot of people know the sentence? The answer would have to be in the negative, since there is nothing obligatory about the presence of the word discontent in the above environment, except for usage and the passage of time. Structural semantics analyzes words into features, some of which automatically imply others. Thus the feature (+Male) generally requires

the feature (+Animate) and this second feature is redundant, but not meaningless.

Martinet has pointed out the usefulness of semantic redundancy in the learning process; for instance, in the following sentences - "I am cold, turn the heating on", or "I am hungry, when do we have dinner?" The meaning of cold and hungry is partially explained by the rest of the sentence. Really the last two examples are cases of contextual-semantic redundancy; i.e. the juxtaposition of very similar notions. In fact, pure semantic redundancy can really only be specified in terms of feature analysis.

The question of syntactic redundancy is complicated by the lack of definition, and because linguists have treated redundancy in rather a casual manner and with different aims in mind. As has already been stated, hypercharacterization is redundancy, but an attempt will be made to clarify in what way a particular category or notion is 'excessively' marked. As Weinreich pointed out redundancy is a surface structure phenomenon. Thus it applies only to the mechanisms or devices that a language employs to mark meaning; redundancy therefore implies excessive information content. For instance, in Russian she came is rendered ona prishla, where the notions of singular, feminine, nominative are marked in both pronoun and juxtaposed verb. It is very likely that the intelligibility of this sequence would not be diminished if the concord were left out by a foreigner speaking Russian. However,

before delving more deeply, one has to determine those grammatical concepts that must be expressed somehow.

The following concepts are considered as vital to comprehension: affirmation, negation, interrogation, number, person, tense, subject, direct object, indirect object and in what way modifiers are linked to what is modified. This very short and simple list should not be considered in any way as universal. It is singularly applicable to Indo-European languages however and, being short and simple, facilitates the task of determining redundancy. These concepts must then be marked by some means, and if it can be shown that in some instances these concepts are marked more than once, ~~then~~ a state of syntactic redundancy can be said to exist. Such concepts as gender will not be dealt with here, since gender is in some way peripheral in relation to, say, the concept of subjectivity. (For discussion see Sapir, Language, p. 94)

Parts of the German sentence du siehst (you see) may be considered redundant, since person and subject and number are marked in both verb and juxtaposed pronoun. How does one know all this? The only reason that one does know all this is because the verb participates in a paradigm where number and person and tense operate as parameters, and because the pronoun participates in a paradigm where number, person and case operate as parameters. Thus the concepts of number and person are marked twice and hence redundancy ensues. Given that we are dealing with an affirmative utterance, case is also redundant, because the subjectivity of du is already signalled by the fact that it occurs before the verb. In other words the order of the elements also plays

a role. This matter will be considered more closely later.

The English sentence you see is unredundant because (a) you does not have a specifically marked object counterpart and (b) because see is not specifically marked for second person. However, in the sentence he sees, he and the -s of sees are redundant because (a) he does have a specifically marked object counterpart (him) and (b) sees is specifically marked for third person and no other person. The definition of this type of redundancy is rather an ad hoc procedure depending upon a knowledge of the structures of a language. One must have an adequate knowledge of the morphological and syntactic systems that mark the meanings given above: word-order, prepositions, postpositions, affixes, case markings etc. and also of the different meanings of these systems and the oppositions in which they participate. Thus an element that can be construed as redundant in one context may be vital to the expression of a meaning elsewhere, which might make the redundancy less liable to change, assuming that redundancy is a factor. Although the co-incidence of a particular word-order pattern with a case system makes for redundancy, it is often true that the word-order system has a number of permutations which mark different emphases or shades of meaning, whilst the presence of the cases marks the base meaning. R. Jakobson has summed up the problem (J. Greenberg, Universals in Language, p. 268). "Greenberg's statements on universals in the 'order of meaningful elements' rightly put forward the notion of a 'dominant' order. We are reminded that the idea of dominance is not based on the more frequent occurrence of a given order; actually what is here introduced into the order of typology by the notion of dominance is a stylistic

criterion. For example, of the six mathematically possible relative orders of nominal subject, verb, and nominal object - SVO SOV VSO VOS OSV OVS - all six occur in Russian. The sentence Lenin cites Marx can be rendered as SVO (Lenin citiruet Marksa), SOV (Lenin Marksa citiruet), VSO (citiruet Lenin Marksa), VOS (citiruet Marksa Lenin), OSV (Marksa Lenin citiruet) and finally OVS (Marksa citiruet Lenin); yet only the order SVO is stylistically neutral while all the 'recessive' alternatives are experienced by native speakers and listeners as diverse emphatic shifts. SVO is the only word order initially used by Russian children; and in a sentence like Mama ljubit papu 'Mama loves Papa', if the order of the words is inverted - Papu ljubit mama, small children are prone to misinterpret it 'Papa loves Mama', as if one had said Papa ljubit mamu. Correspondingly Greenberg's first universal could be restated as follows: In declarative sentences with nominal subject and object, the only or neutral (unmarked) order is almost always one in which the subject precedes the object. If in a language like Russian the subject and object are not distinguished by morphological means, the relative order SO is compulsory - Mat' ljubit doc', 'Mother loves daughter', inversion of the nouns would mean 'The daughter loves the mother'. In languages without distinctive characteristics of object and subject the relative order SO is the only one admissable." Bever and Langendoen (p. 26) reveal similar results with reference to the question of the way in which young children perceive sentences. "For example, within a clause, children of four years tend ... to take the first noun as the actor, even in passive ... or cleft ... sentences ..."

Thus any objections made against syntactic redundancy in terms of the variability of word order is vitiated in part by recourse to the notion of dominance. Although the German word-order system can be free, in general it has a fixed pattern. The problem raised earlier concerning the subjectivity of German du because of its position in the sentence is resolved by appeal to the notion of dominant order.

Perhaps an experimental approach would serve to define syntactic redundancy, where subjects would be asked to give the meaning of sentences which had successively more features eliminated. At the point just before the first occurrence of a misunderstanding, redundancy would cease. This approach would probably simply yield telegraphic utterances, and one would have to conclude that all the "function" words etc. are redundant. This would not be admissible since, of course, it would mainly be semantic redundancy that was being reduced, e.g. the verb go includes the feature of motion, and hence the preposition to can be omitted in telegraphic style. Furthermore, if it is clear who the addresser and addressee of an utterance are, then it is possible to omit pronouns etc., e.g. the ambiguity of Going London to-morrow is removed in the context of situation. (See B.Th. Tervoort, You me downtown movie fun? *Lingua* 21, 1968, pp. 455 - 465). Such experimental procedures would be inadequate for an evaluation of syntactic redundancy.

Martinet states (Functional View, p. 55) "Concord is redundancy, and contrary to what could be expected, redundancy results, as a rule, from least effort." Martinet is however imprecise; concord alone is

not redundancy. Redundancy arises as a result of overlapping systems; in the case of concord the order of elements could make concord redundant or vice versa. For instance, Vergil's Aeneid would be incomprehensible without concord. Syntactic redundancy exists then, when a grammatical category is marked simultaneously by taxemes (Fries) or monemes (Martinet) that belong to different systems. By this definition and according to previous examples it would be necessary to identify taxemes that signal person, number and case in the noun and pronoun as belonging to a different order from those taxemes that signal person, number, mood, tense and voice in the verb. Considering the differences this seems reasonable. This view is supported by G. Bernard (*Études de linguistique appliquée*, 1967, p. 20). "Désormais on n'opérera plus sur des phonèmes, mais sur des morphèmes et des classes de mots.. Ainsi, les morphèmes, en français, sont souvent répartis sur plusieurs segments, la modification de l'un entraînant une modification de l'autre. C'est le cas, par exemple, des 1^{ère} et 2^e personnes pluriel des verbes: /nu... $\tilde{\text{O}}$, vu... e/ nous nageons, vous nagez. Doit-on parler ici de "morphèmes disjoints", l'un des éléments ne se présentant pas sans l'autre (sauf dans les énoncés injonctifs), ou de redondance? La disjonction d'un morphème unique de 1^{ère} personne du pluriel apparaît bien à l'analyse, mais, dans la chaîne parlée, j'ai bien affaire à un automatisme contraignant, le deuxième élément ne m'apportant rien que je ne sache déjà sur le nombre des sujets impliqués dans l'énoncé (ce nombre étant différent de 1) ou sur les relations des interlocuteurs (vous # tu). Ce surplus d'information dont

je pourrais me passer, mais dont, en fait, je ne me passe pas, est bien caractéristique de la redondance... ".

He goes on to point out that the degree of redundancy is a function of the degree of analysis. For example, a high degree of redundancy would obtain if one segmented a language into broad function classes, say, into nominal and verbal syntagms, which would result in the entirely predictable succession NV NV... "Plus la formulation est simple, plus grande est la redondance."

Having tentatively established what syntactic redundancy is, we must try to find examples that support the principle that reduction of redundancy is a factor in linguistic evolution.

CHAPTER 3

In this chapter examples from contemporary languages that do and do not support the redundancy hypothesis will be discussed, and a further refinement of the ideas sketched in the last chapter will be attempted. The main part of this work will consist in the analysis of Old English in the next two chapters.

The choice of redundancy as a factor in linguistic change relates this study to the systemic approach characterized by Jespersen's and Martinet's work in this field, where an attempt has been made to relate linguistic changes to the pressures within the whole system. M.L. Samuels (*The Role of Functional Selection in English*) shows how homonymic clash was systematically avoided to a considerable extent in English after the Great Vowel Shift by functional selection. Martin Lehnert (*The Interrelation between Form and Function in the Development of the English Language*) gives evidence to show (a) that factors other than phonology are involved in linguistic change and (b) that changes that are taking place in the language may be impeded or helped by the functional importance of different forms. Lehnert's first law: "Parts of a word or a combination of words which reduce or lose their function may be reduced or dropped", forms the basic idea in the redundancy hypothesis. However, syntactic redundancy is more confined to the systemic aspect, since it is defined as being the result of overlapping systems, rather than of functionless words or elements.

The notion that functionless elements in language disappear relatively easily would appear to be a common-sense assumption. For instance, the form to has no really significant function in sentences such as I'm going to live etc., and frequently this sentence is rendered I'm gonna live. On the other hand, in sentences where to has a clear function (preposition), there is less or no tendency to amalgamate the verb form with the to; e.g. in my dialect it would be impossible to say I'm gonna New York. However, it must be stressed that to in the sequence I'm going to live is not a case of syntactic redundancy, because it is simply a dematerialized part of the verbal system.

On the lexical level there are tendencies towards simplification. Admittedly these tendencies are not instances of syntactic redundancy, but like the to example given above, they support in principle the notion of Lehnert's first law and indirectly the redundancy hypothesis. Abbreviated forms such as prof and bus and acronyms such as radar and laser are very common. Furthermore, it has been shown that the 500 most commonly used words in most languages are on average shorter than the next 500 most commonly used words, (Martinet, Functional View, p. 144). These examples are indicative of a trend toward simplicity of expression. In absolute terms prof is not the unredundant form of professor, since prof could equally well be the unredundant form of profound etc.

On the syntactic level redundancy is found in syntagms such as I am, he is etc., where word-order patterns relate the pronoun to

the verb in a precise fashion, and where both the forms of the verb and the pronoun are clearly marked for person (in the singular at least); here then the verbal agreement is superfluous. If the redundancy hypothesis works, then why do such syntagms still exist? Dialect studies furnish very satisfactory counter-examples, however. Morris (Yorkshire Folk Talk, p. 28) gives the following paradigm for the verb be :

Ah is	We are
Thoo is	You are
He is	They are / is

The singular column shows great simplification in relation to the usage of Standard English, which is probably artificial in this respect, having been preserved by the influences of education and the mass media, and there has in effect been a reduction in redundancy. In this instance only number is distinguished in the verb, where in the Standard dialect both number and person are distinguished in the verb.

Other examples point to the redundancy hypothesis going too far in some cases and not far enough in others. Thus in French frequently the first and second person plural of the pronoun + verb syntagm are overmarked, whilst the third persons singular and plural are not distinguished. It is interesting to note that the first and second person plural pronouns (nous, vous) are in fact notionally the most complex, since nous can comprise je and tu and the third person pronouns, and vous can comprise tu and the third person pronouns, whilst the other pronouns je, tu, il, ils, etc. are notionally simple.

Thus this fact could be an explanation for the overabundance of marking in the first and second person plural pronouns in French. On the other hand the first and second person singular pronouns reveal neither redundancy nor ambiguity, e.g.:

- | | | | | |
|----|-------------|-------------------------|---|---------------------------|
| A. | Je vois | /zə vwa / |) | - ambiguity, - redundancy |
| | tu vois | /ty vwa / | | |
| B. | nous voyons | /nu vwaj ⁵ / |) | + redundancy |
| | vous voyez | /vu vwaje / | | |
| C. | il voit | / il vwa / |) | + ambiguity |
| | ils voient | / il vwa / | | |

This is rather disturbing, since the singular/non-singular distinction is a vital one, although the context of situation will often disambiguate

C. It is interesting to note that sandhi phenomena in French do disambiguate instances of C, when the verb begins with a vowel, e.g.:

il aime	/ il em /
ils aiment	/ ilz em /

Here the underlying / z / of the third person plural pronoun has resurfaced in order to fit in with French phonological patterns.

According to H. Frei (Grammaire des Fautes, p. 32, cited by V. Tauli, 1958) vernacular French uses invariable endings, e.g. je va tu va il va etc. Such phenomena are no doubt attributable to the forces of analogy, but in the end result the analogical forces are only permitted to function because the old forms are superfluously

marked. In many modern German dialects the cases have disappeared or are rapidly disappearing, e.g. Alemannian ich hab der vatter net gsehe, where the accusative has merged with the nominative (Behaghel, Die deutsche Sprache, p. 32, - cited by V. Tauli, 1958).

Creolization processes too provide interesting examples of simplification. In effect, Creoles seem to be a form of telegraphic communication, at least in the early stages of their development. Such utterances as me wan go for I want to go are quite common, e.g. according to Tesnière (TCLP 8, p. 91) "Tel est le cas pour le Caucase ou A. Dirr, cité par Vendryes (Le Langage, p. 345) a constaté que, là où les langues sont très mêlées, comme par exemple au Daghestan, 'le résultat le plus remarquable est dans la simplification de la morphologie'. Tel est également le cas de toutes les variétés de sabir, créole, petit nègre, pidgin English, etc.' Frequently the distinction between adjectives and adverbs is lost and not only in creolized speech, e.g.

He does it real good or She dances pretty good, where the redundant distinction between good and well has been lost. However, the fact that good and well are frequently not distinguished is probably due to the artificiality of this distinction. For instance, She dances pretty happy is not heard in colloquial speech, and the adjective/adverb distinction is maintained in most cases.

There are, however, many examples that do not conform to the redundancy hypothesis. For example, the inflection of the pronoun in the prepositional phrase with whom is expressed redundantly. It is obvious that whom is subordinated to with because the preposition

precedes and is juxtaposed to the pronoun. Thus one would expect the pronoun to lose the final / m / in this position. This is not the case in fact, since this is the only position in which the case marker / m / is obligatory, e.g.:

A. The girl who I went out with.

B. The girl with whom I went out.

In A the pronoun is not marked by the case of the preposition, even though it is at some distance from it, whilst in B the marking is obligatory, although highly redundant. Cases similar to this are found in Old English, where elements governed by a preposition but at some distance from it, do not, in fact, show the case of the preposition. This particular phenomenon will be dealt with in the section on results.

The role played by syntactic redundancy in linguistic evolution is hard to abstract from all the other tendencies that are thought to operate. Most of the IE languages in Europe are characterized by their general analytic tendencies, i.e. inflectional endings have disappeared to a great extent. In this respect Russian and Icelandic are perhaps the most conservative, and English and the Western Romance languages the least conservative, with German finding itself more or less in the middle. No one has explicitly stated that any case language will automatically become a non-case language, whatever the circumstances, within an indeterminate period of time, since, although such a view is attractive by IE case history standards, not enough is known about the histories of other language families. In spite of the fact that case-loss may be a general tendency especially where the morphology is complex and irregular, (Tauli, 1958, p. 21), (Lehnert, 1957, p. 56) there seems good reason to

believe that case-loss is also actively furthered by the rise of other significant structures within a language (Tauli, 1958, p. 73). Thus it is probably true that in the broadest terms we can only acknowledge change as a fundamental aspect of language; however, this truth does not rule out research into the pressures affecting linguistic interrelationships. Two types of change might be recognized then (a) inherent change and (b) determined change. Inherent change comprises all those changes, the causes of which cannot be determined, e.g. the weakening of the final inflected syllables in early English. Determined change operates on inherent change according to some definable pattern, cf. Lehnert's second law (p. 52) and the example given there. Istvan Fodor (1965, p. 63), speaking about the internal operator (i.e. inherent change), states: "We know nothing about them except their existence." The role of syntactic redundancy would fit into the category "determined change", since it is only in this category that causality can be determined.

One of the main problems concerning the role of redundancy in linguistic change has been pointed out by W. Dressler, (*Die Erhaltung der Redundanz im Lateinischen*, p. 77) "Wenn die Redundanz ein essentieller Bestandteil jeder Sprache ist, so folgt daraus deduktiv, dass die Redundanz in der Entwicklung einer Sprache im wesentlichen bewahrt bleiben muss." (roughly translated this reads: If redundancy is an essential component of language, then it follows that redundancy must be preserved in the evolution of a language.) The view that redundancy is an essential part of language is supported (a) by the fact that normal speech is not telegraphic and (b) by the information-theoretical doctrine of G.A. Miller's "An error should not change the message into

another likely sequence", (Language and Communication, p. 106, cited by Dressler). However, from the examples of redundancy being retained in Latin given by Dressler, it is obvious that his conception of redundancy is not altogether the same as the one here presented, e.g. p. 79, "The considerable redundancy due to Latin congruence does not disappear by the reduction of the full system of endings in the Romance languages, but is maintained by the fixed word order." As has been previously stated concord or congruence is not necessarily redundancy and neither is word-order. Dressler's general view is not acceptable, and we must assume that some language systems at some point in their history contain more redundant elements than at other points in their history, although it is very likely that there exists a minimum level of redundancy, below which a language as a whole does not fall.

The redundancy hypothesis, as presented here, is basically negative in aspect, i.e. it only serves as an eliminating force. Dressler (p. 81) does show how his conception of redundancy is expanded in Latin due to simplification in other parts of the system. Indeed there is no reason why redundancy should not also act as an "expanding, expressive" force. In this work the eliminating forces only of redundancy will be tested with reference to Old English, a body of information, that unfortunately lends itself very easily to the formation of prior judgements on simplification trends in language. One further point on the general theory of syntactic redundancy must be made. Is syntactic redundancy, as here defined, applicable to languages that have no system of endings, i.e. nominal, pronominal, adjectival and verbal paradigms? The answer would

probably have to be in the negative because syntactic redundancy is dependent on overlapping systems of case, number, word-order, etc. This fact, of course, considerably reduces the usefulness of syntactic redundancy as a concept in the description of linguistic change and perhaps also its validity as a universal, but otherwise not.

CHAPTER 4

Before going on to state and apply the redundancy hypothesis to Old English, it would be useful to investigate briefly some related work done on Old English.

C.C. Fries' work on Old English word-order (On the Development of the Structural Use of Word-Order in Modern English, Language 16, 1940, pp. 199 - 208) is of particular relevance, since word-order patterns will form an integral part of this work. The statistical investigation centers on the gradual fixing of position of the accusative and dative objects over a period of 500 years. "The change from the OE free position of accusative object (either before or after the verb) to the Modern English fixed position after the verb is indicated by the following figures."

	1000	1200	1300	1400	1500
Accusative Object before Verb	52.5%	52.7%	40+%	14.3%	1.87%
Accusative Object after Verb	47.5%	43.7%	60-%	85.7%	98.13%

Fries goes on to give similar examples with regard to the position of the dative object in relation to the accusative object and the verb. His conclusion is that word-order has assumed the function of the taxemes that mark the essential concepts, whilst taxemes of selection (inflection) mark only the dispensable ones (i.e. genitive). Unfortunately Fries gives no indication as to the rate of decline of overt case

distinctions, nor does he plot the position of the accusative object in relation to the subject. The problem of case-loss has been exhaustively dealt with by Samuel Moore (Loss of final -n in inflectional syllables of Middle English.. Language, vol. 3, 1927, pp. 232 - 257). Basically the loss of inflectional /-n/ in English forms a great part of the total distinctive case-loss. He points out that case-loss in English cannot merely be due to sound change (p. 233). "But from the fact that in all texts.... the loss of /n/ was more complete in some grammatical forms than in others we may infer that the distribution of forms with and without /n/ was not the result of sound change alone. It seems reasonable to expect that sound change alone would result in: (1) complete loss of /n/; or in (2) a distribution of forms with and without /n/ that would correspond to phonetic categories, not grammatical categories". Moore's findings indicate the workings of analogy subsequent to sound change; however, once again there has been no attempt to tie the loss of case in with the changes in word-order, i.e. syntactic functions are ignored in Moore's paper.

Works which synthesize the loss of the English (or any other) case system with the immediate functions are relatively rare (cf. Hans Marchand, The Syntactical Change from Inflectional to Word Order System and Some Effects of This Change on the Relation Verb/Object in English. A Diachronic/Synchronic Interpretation, Anglia 70) and rather restricted. Hopefully the application of the redundancy hypothesis will partially make up this deficiency.

Hypothesis

The argument centers fundamentally around the syntactic conditions under which the English case-system disappeared from the language. It took approximately 300 years from the very beginning of the disruption of the system around 950 A.D. for it to be by and large completed. Evidence of the case-system is still found in the latest text used here, No. 51 - Liffade of St. Juliana, but the usage is extremely inconsistent and examples are very few. 300 years is a relatively short period of time for such major changes to have occurred and tentative reasons have been sought for them. Most traditional works on the subject have attributed (Bradley, 1968) these changes solely to attrition, foreign influence and shifting stress patterns. However, it is clearly obvious that not all categories were equally affected during the disruption, as S. Moore (1927) has demonstrated. Thus it seems reasonable to believe that case-loss affected all these categories differently according to some sort of pattern, and this pattern is deemed crucial. The supposition here has chosen syntactic redundancy as the factor that may partially determine the pattern.

Since word-order is crucial in Modern English, a study of Old English word-order patterns and environments was considered to be a major component in the possible redundancy of OE, and thus a large number of similar clause types was studied before, over and after this important period in the development of English according to the methods described in the next section. The period of greatest interest is undoubtedly the one in which syntactic functions were transferred

from synthetic to analytic structures. However, to the best of my knowledge this problem has never been worked out. Clearly the transfer took some time to complete itself and at times grammatical notions, such as Direct Objectivity etc., must have been marked by both synthetic and analytic structures, resulting in syntactic redundancy. Thus it was felt that despite the potential flexibility of OE word-order, this potentiality was probably not realized to a great extent vis-à-vis the relative order of elements signalling indispensable grammatical notions. It is therefore not a question of what word-order possibilities existed in OE, but rather what word-order patterns were actually used. Fries (1940) quotes these two sentences (amongst others) as an example of the flexibility in OE.

(A) Se mann þone beran sloh

(B) þone beran se mann sloh

Both sentences are identical in meaning (the man killed the bear). However, it was considered that there would actually be only one dominant pattern that far outweighed other patterns statistically. Furthermore, it was considered that these dominant patterns would be fairly consistent during the period of OE under discussion. Could this be shown, then to some degree accusative endings etc. would be redundant, since the function of the element in question would also be marked by a particular order of the elements. Could it also be shown that case-endings were lacking more frequently in unmarked environments, then there would be good reason to believe that the

internal or inherent change factor would be less frequently impeded in syntactically redundant environments.

A.A. Hill in a review of Jan Šimko's book "Word-order in the Winchester Manuscript and in William Caxton's edition of Thomas Malory's Morte Darthur (1485) - a comparison" (Language, vol. 35, No. 3, 1959, pp. 561 - 564) quotes the following few lines from Šimko's work (p. 112) "The theoretical value of the present word-order investigation lies in its denial of the opinion suggesting that the simplification of English inflections must have been preceded by a stabilization of the word-order. In reality the inflectional decay took place before the fixation of the word-order." This view is diametrically opposed to the view presented here. Hill is in fact critical of Šimko's methods of word-order analysis and points out that no evidence has been adduced by Šimko concerning case-loss.

Procedures - General

Eight early English texts were chosen that covered the period 895 - 1225 A.D. approximately. Each text is separated from the preceding one by roughly 50 years and is representative of the West-Saxon dialect. The word-order patterns of each text were then examined with reference to the 'case' forms, i.e. nouns, pronouns and adjectives in four cases - nominative, accusative, dative and genitive (the instrumental being excluded) giving a total of 12 categories. In fact, 15 categories are actually used, since accusative and dative nouns are divided into two classes each; one class being governed by a preposition and the other being the direct object and indirect object respectively (this does not apply wholly to the latter, since some verbs

take the dative). Pronouns are represented by the nominative, the accusative (direct object) and the dative (prepositional and indirect object with the same restriction as for the dative noun). No prepositional-accusative or genitive category has been included for the pronouns, since these are rare categories. Adjectives are represented by the nominative, two accusative types (prepositional and direct object), the dative and the genitive. No prepositional-dative category has been included for the adjective because initially the distinction between dative (indirect object) and dative (prepositional) was omitted. This deficiency has been made up for the nouns and pronouns but in the case of the adjectives this was considered unnecessary, since the vital relationships are marked by the nouns and pronouns anyway. The following table shows the categories used:

<u>Nouns</u>	<u>Pronouns</u>	<u>Adjectives</u>
Nominative	Nominative	Nominative
Accusative (D.O.)	Accusative (D.O.)	Accusative (D.O.)
Accusative (Prep.)	---	Accusative (Prep.)
Dative (I.O.)	Dative (I.O.)	Dative (I.O. & Prep.)
Genitive	---	Genitive

It must be noted that, because the distinction between Dative (I.O.) and Dative (Prep.) was initially omitted, all the datives were categorized together. All the categories Dative (prep.) still contain the information for the Dative (I.O.). However, this is a minor point, since no general patterns are concealed. Verbal endings are not noted, except

insofar as the occasional deletion of final /-n/ in the plural is concerned.

Each text was examined for the forms which had lost distinctive inflection. The problem that arose in this connection was that forms occurred, which were "incorrect" vis-à-vis the forms given in Sweet's "Anglo-Saxon Primer" (pp. 8 - 24), but yet retained a distinctive inflection. For example, Sweet (p. 14) gives bec as the dative of boc (book). However, in some texts one finds the dative form boke, no doubt on the analogy of daeg - daege, beside the nominative form boc. Obviously it would be wrong to consider that the dative form boke had lost its inflection. D.R. McIntock (1965) gives a similar argument. "It is clear that while performing this task one must resist any inspiration that might come from comparative philology, recognising only those distinctions of which the scribes seem to have been aware... Unless one finds traces of a distinction in the texts themselves, one must assume that the scribes have given us all the information there is to give." This is sound advice and each text must be analysed according to its own system of distinctions. Sweet's Primer, however, served as an invaluable guide and as a base from which to start.

This procedure yielded not only a sketch of the unidialectal word-order patterns of 15 inflected categories over some 330 years, but also a measure of case-loss in those categories in the particular environments in which they occurred, since the material used served as evidence for word-order patterns and for the measure of case-loss as well.

Specific

The actual method of determining word-order patterns consisted in listing all the forms of a category, say, nominative (subject) noun (singular and plural) down the left hand side of the page. The horizontal column at the top of the page contains all the inflecting categories previously mentioned in addition to verbs and prepositions. No account is taken of conjunctions or adverbs except where they appear to have a special bearing on the problem. For example, OE clause initial tha (for typing convenience th is used instead of θ and δ) has the effect of inverting subject and verb in many cases, and this fact is taken into account. Where a nominative noun occurs, for example, after a nominative adjective and before an accusative adjective and noun, this is marked by three ticks in the horizontal column below the categories post-nominative adjective and pre-accusative noun and adjective. Once all the nominative nouns in a text have been analysed in this way, the total number of ticks in each column is added together and furnishes a rough word-order pattern for a particular case category at a particular time. The framework for the analysis is the clause. (For justification see Ann Shannon - 1964, p. 67). An attempt has been made to investigate only declarative clauses in the active voice. The samples of text chosen furthermore are mainly descriptive of events, since the type of language used for such descriptions appears to be more susceptible to the needs of the analysis; in other words the cases of the forms themselves are more easily distinguishable on the basis of function rather than form alone.

TABLE I

Nominative Nouns					Pre-Adj.				Post-Adj.				Pre-Noun				Post-Noun				Pre-Pron.				Post-Pron.					
	av	pv	ap	pp	/	N	A	D	G	/	N	A	D	G	/	N	A	D	G	/	N	A	D	G	/	N	A	D	G	/
haelend-crist	*		*								*																			
gedwol-menn (pl)	*		*								*																			
Crist	*		*												*				*											
sunu		*	*													*			*											
godspell	*										*							*												
iudeiscan (pl)	*										*							*												
anginn		*																										*		
haelend	*		*								*																			
ordfruma		*	*						*										*								*			
anginn		*	*						*										*								*			
man	*										*																			
thrynnes	*										*				*															
anginn		*														*														
scyppend		*							*		*			*		*			*								*			
14	8	6	7	0	0	0	0	3	8	0	0	0	2	2	0	4	3	0	0	1	0	0	0	0	3	0	0	0	0	0

av = ante verbal; pv = post verbal; ap = ante prepositional; pp = postprepositional; N = nominative; A = accusative; D = dative; G = genitive; Pre-Adj = pre-adjectival; Post-Adj = post-adjectival; Pre-Pron = pre-pronominal; Post-Pron = post-pronominal.

Demonstratives (e.g. se etc.) are counted as adjectives and the elements are related only to the finite verb. The loss of a relationship is clearly demonstrated in clause 10, where the nominative noun thrynnes follows two nominative adjectives seo halige, but there is no way of showing this fact on the table, since there is only one slot for post-nominative adjectives. Furthermore when the sum totals are compiled much cross-referenced information is lost; e.g. one does not find out how many nominative nouns preceded by the verb are also preceded by a prepositional phrase etc. In this regard the analysis is rather clumsy. Again, when a nominative noun is marked as preceding an accusative and a dative noun, there is no way of telling whether the accusative noun precedes or follows the dative noun. This information is, however, available from the sections on these two particular categories.

The advantage here is that it allows one to see in a general way how an element stands in relation to every other element in the clause. (except for adverbs, etc.). Too frequently word-order analyses are carried out with too few points of reference. For example, Fries plots the position of the accusative object with reference to the verb in the table cited on page 31. The only exceptions made to this rule are in the cases of the dative and accusative nouns, adjectives and pronouns governed by a preposition and in the case of genitive nouns. For instance, where a nominative noun precedes a prepositional phrase with an accusative noun in it, then the nominative noun is marked only as being pre-prepositional and not pre-accusative noun etc. Genitive nouns are specially marked for the relationship to the governing noun.

Dative nouns, pronouns and adjectives not governed by a preposition are not related by an asterisk to the preposition column, even if a preposition occurs in the same clause, since this would cause confusion.

This type of analysis provides a binary charting of the relationships between the elements, i.e. it does not state the distance between two elements, as has already been mentioned. However, it is possible to reconstruct the actual clauses given the various elements and their distribution in matrix form. A sentence such as se man sloh thone beran has four inflectable elements:

	Noun	Adjective/Demonstrative
Nominative	man	se
Accusative	beran	thone

Each of these elements is represented differently in one of the tables and the original sentence is reconstructable by a process of deduction e.g. the element thone is post-nominative adjective and noun, post-verbal and pre-accusative noun. This information tells us nothing about the relative positions of se man and sloh; however, the tables for nominative adjective and noun would furnish this information.

Once this analysis had been completed for the 8 texts in question all those forms in the 15 categories were abstracted and put in similar, separate lists with their word-order patterns. The word-order patterns of the case-loss forms were then compared with the original word-order patterns of all the forms found in the texts. The following texts were used. In each case the approximate date is supplied by the editor himself.

1. Gregory's Pastoral Care	Sweet	895	AD	EETS	45
2. An Old English Martyrology	Herzfeld	950	AD	EETS	116
3. Aelfric's Lives of Saints	Skeat	1000	AD	EETS	76
4. History of the Holy Rood-tree	Napier	1050	AD	EETS	103
5. Twelfth Century Homilies	Belfour	1100	AD	EETS	137
6. Old English Homilies	Morris	1150+	AD	EETS	34
7. Old English Homilies of the 12th Century	Morris	1150+	AD	EETS	53
8. Liflade of St. Juliana	Cockayne	1225+	AD	EETS	51

These texts will be referred to by their EETS numbers in future. It must be noted that the History of the Holy Rood-tree is not really a representative of the period 1050 A.D., since it is a direct 12th century copy of an 11th century text. In fact, of course, very few texts of the time were originals, but one simply has to turn a blind eye to obvious influences from Latin and French. In the first text, number 45, the Cotton MSS were used.

CHAPTER 5

Results

The results of the word-order analysis are shown in the following tables. Although genitive nouns and adjectives were analyzed with reference to their distribution patterns, this information is omitted here as being largely irrelevant to the basic word-order patterns of OE, since the genitive noun comes directly before or after the noun it modifies and has no more syntactic weight than the adjective. Table II shows the diachronic word-order patterns for nominative nouns. The first column contains the texts used, arranged in chronological order. The next column indicates the total (TOT) number of nominative nouns analysed in each text. The next column (av) shows the percentage of nominative nouns occurring before the verb and the next column shows the percentage occurring after the verb (pv). For the meaning of all the headings see Table I. It is important to note that all the figures in all the tables are percentages except those that are in the total column (TOT). The figures in the pre-adjective (N) column (i.e. the percentage of nominative nouns occurring before a nominative adjective) indicate in fact adjectives in the predicate, e.g. thaette aefre men sceoldon swa reccelease weorthan (that men should ever become so reckless) in almost every case; (No. 45, p. 4). There are two exceptions; sylf (him/herself) has been counted as an adjective and occurs after the noun, e.g. Crist sylf us thaes faesten es bysne onstealde, (Christ himself set us the example of the fast, No. 137, p. 96). In conjunction with god, almihtiz usually comes after the noun, e.g. god almihtiz.

TABLE II

Text No.						Pre-Adj.			Post-Adj.			Pre-Noun			Post-Noun			Pre-Pron.			Post-Pron.		
Nominative Nouns	TOT	av	pv	ap	pp	N A D			N A D			N A D			N A D			N A D			N A D		
						N	A	D	N	A	D	N	A	D	N	A	D	N	A	D	N	A	D
45	88	76	24	44	10	2	10	0	75	1	1	0	18	3	0	2	1	0	3	6	1	6	5
116	84	52	48	26	25	4	10	1	46	2	2	2	21	6	0	2	2	0	5	1	17	10	5
76	141	71	29	36	8	7	7	3	57	1	0	6	20	4	6	1	0	0	1	0	9	6	4
103	89	58	42	53	17	3	15	1	60	1	0	0	19	1	0	1	0	0	6	5	2	6	15
137	202	61	39	48	5	4	16	6	65	0	0	4	21	7	3	0	5	0	5	9	7	3	3
34	118	60	40	53	11	4	14	3	53	1	1	3	21	9	2	1	1	0	4	3	4	5	1
53	97	75	25	38	3	3	8	0	63	1	0	1	19	1	3	1	0	1	10	2	11	10	1
51	68	60	40	32	2	3	3	0	60	0	0	4	4	0	0	0	0	0	19	3	24	1	10

av = ante verbal; pv = post verbal; ap = ante preposition; pp = post prepositional;

N = nominative; A = accusative; D = dative; Pre-Adj. = pre-adjectival; Post-Adj. = post-adjectival;

Pre-Pron. = pre-pronominal; Post-Pron. = post-pronominal; TOT = total.

Where a nominative noun is shown as preceding or following a nominative noun or pronoun, it is again a case of subjectival predication. The needs of the analysis are not really met by the inclusion of such figures; however, they are retained. The following tables have been simplified since the tables in their original form are too hard to read. The tables show the relative positions of the main elements in the clause. The numerical total of any category is placed in brackets after the text number; all the other numbers are percentages. Although in Table II the percentages have been rounded off to the nearest integer for typing convenience, the decimals are retained below.

Nominative Nouns

Pre-Acc.					Pre-Dative				
		Noun	Pronoun				Noun	Pronoun	
45	(88)	17.5	3.4	= 20.9	3.4	5.6	=	9.0	
116	(84)	21.4	4.8	= 26.2	6	1.2	=	7.2	
76	(141)	19.9	0.7	= 20.6	4.3	0	=	4.3	
103	(89)	19.1	6.7	= 25.8	1.1	4.5	=	5.6	
137	(202)	20.8	5.4	= 26.2	7.4	8.9	=	16.3	
34	(118)	21.2	4.2	= 25.4	8.5	3.4	=	11.9	
53	(97)	19	10	= 29	1	2	=	3	
51	(68)	4.4	19.1	= 23.5	0	2.9	=	2.9	

Post-Acc.					Post-Dative				
		Noun	Pronoun				Noun	Pronoun	
45		2.3	5.6	= 7.9	1.1	4.5	=	5.6	
116		2.4	9.5	= 11.9	2.4	4.8	=	7.2	
76		1.4	6.4	= 7.8	0	3.5	=	3.5	
103		1.1	5.6	= 6.7	0	14.6	=	14.6	
137		0	3	= 3	0.5	2.5	=	3.0	
34		0.8	5.1	= 5.9	0.8	0.8	=	1.6	
53		1	10	= 11	0	1	=	1.0	
51		0	1.1	= 1.1	0	9.7	=	9.7	

As can be seen nominative nouns precede accusative nouns with a great degree of regularity, diachronically speaking, in all texts but No. 51. The variation lies between 17.5% (No. 45) and 21.4% (No. 116). Nominative nouns also occur mainly before dative nouns, especially in the later texts. As far as the pronoun is concerned, however, no particular diachronic order seems to be established. Of course, relative pronouns are included in this analysis and relative pronouns occur clause initially. The following general statements can be made about the nominative nouns during the period under investigation.

1. Nominative nouns precede accusative nouns.
2. Nominative nouns precede dative nouns.
3. Nominative nouns do and do not precede accusative pronouns.
4. Nominative nouns do and do not precede **dative** pronouns.

Accusative (Direct Object) Nouns

		Pre-Nom.				Pre-Dative			
		Noun	Pronoun			Noun	Pronoun		
45	(78)	2.6	1.3	=	3.9	2.6	0	=	2.6
116	(58)	3.4	0	=	3.4	1.7	0	=	1.7
76	(90)	3.3	3.3	=	6.6	1.1	0	=	1.1
103	(90)	1.1	1.1	=	2.2	0	0	=	0
137	(141)	0	2.1	=	2.1	2.8	6.4	=	9.2
34	(105)	1.9	1.9	=	3.8	0.9	0	=	0.9
53	(97)	1.1	1.1	=	2.2	1.2	0	=	1.2
51	(93)	0	2.2	=	2.2	0	0	=	0

		Post-Nom.				Post-Dative			
		Noun	Pronoun			Noun	Pronoun		
45		20.5	75.6	=	96.1	1.3	2.6	=	3.9
116		41.4	51.7	=	93.1	3.4	6.9	=	10.3
76		41.7	48.9	=	90.6	1.1	2.2	=	3.3
103		28.9	64.4	=	93.3	2.2	7.8	=	10
137		36.2	59.6	=	95.8	1.4	11.3	=	12.7
34		35.2	58.1	=	93.3	7.6	5.7	=	13.3
53		25.6	72.2	=	97.8	0	11.7	=	11.7
51		5.4	89.2	=	94.6	0	9.7	=	9.7

Accusative nouns follow nominative nouns and pronouns to a great degree in all periods. They almost never precede dative pronouns except in No. 137 (6.4%) and occur before and after dative nouns, with a tendency to occur after them in the later texts, e.g. No. 34 (7.6%).

1. Accusative nouns follow nominative nouns and pronouns.
2. Accusative nouns follow dative pronouns.
3. Accusative nouns do and do not follow dative nouns.

Dative and Indirect Object Nouns

	Pre-Nom.			Pre.-Acc.		
	Noun	Pronoun		Noun	Pronoun	
45 (14)	7.1	14.3	= 21.4	7.1	0	= 7.1
116 (5)	0	0	= 0	20	0	= 20
76 (17)	0	0	= 0	0	0	= 0
103 (5)	0	0	= 0	40	0	= 40
137 (21)	4.8	0	= 4.8	9.5	0	= 9.5
34 (24)	4.2	12.5	= 16.7	25	0	= 25
53 (12)	0	8.3	= 8.3	7.7	0	= 7.7
51 (1)	0	0	= 0	0	0	= 0

	Post-Nom.			Post-Acc.		
	Noun	Pronoun		Noun	Pronoun	
45	14.3	64.3	= 78.6	7.1	14.3	= 21.4
116	60	40	= 100	0	20	= 20
76	35.3	64.7	= 100	11.8	5.9	= 17.7
103	20	80	= 100	0	20	= 20
137	66.7	28.6	= 95.3	9.5	19	= 28.5
34	54.2	29.2	= 83.4	4.2	4.2	= 8.4
53	16.7	75	= 91.7	15.4	15.4	= 30.8
51	0	100	= 100	0	0	= 0

Unfortunately the number of dative (indirect object) nouns sampled is very low and cannot really be regarded as representative, except perhaps in the case of Nos. 137 and 34.

1. Dative nouns follow nominative nouns and pronouns.
2. Dative nouns follow accusative pronouns.
3. Dative nouns do and do not follow accusative nouns.

As can be seen not all the dative nouns are with an accusative noun or pronoun in the same clause, e.g. in text 45 7.1% of the dative nouns precede an accusative noun, whilst 21.4% (7.1% + 14.3%) follow an accusative noun or pronoun. Thus only 28.5% of the dative nouns are truly indirect object.

Nominative Pronoun

		Pre-Acc.			Pre-Dative		
		Noun	Pronoun		Noun	Pronoun	
45	(180)	27.2	16.1	= 43.3	5.0	6.1	= 11.1
116	(77)	32.5	13	= 45.5	3.9	6.5	= 10.4
76	(139)	21.6	7.9	= 29.5	5.8	5.0	= 10.8
103	(224)	21.0	17.0	= 38.0	3.1	5.4	= 8.5
34	(106)	47.2	15.1	= 62.3	5.7	5.8	= 9.5
137	(260)	28.1	10.0	= 38.1	3.1	10.8	= 13.9
53	(157)	25.5	15.9	= 41.4	3.2	12.7	= 15.9
51	(183)	26.8	23.0	= 49.8	0.6	9.8	= 10.4

		Post-Acc.			Post-Dative		
		Noun	Pronoun		Noun	Pronoun	
45		0.6	3.9	= 4.5	2.8	1.7	= 4.5
116		0	2.6	= 2.6	0	0	= 0
76		2.2	3.6	= 5.8	0.7	0	= 0.7
103		1.3	5.8	= 7.1	0	7.6	= 7.6
34		1.9	2.8	= 4.7	1.9	0	= 1.9
137		0.8	4.2	= 5.0	0	1.2	= 1.2
53		0.6	5.1	= 5.7	0.6	0.6	= 1.2
51		2.2	3.8	= 6.0	0	2.7	= 2.7

Nominative pronouns generally occur clause initially, except when an accusative or dative relative pronoun occurs in the clause. Nominative pronouns are therefore highly stratified in the OE clause.

1. Nominative pronouns precede accusative and dative nouns.
2. Nominative pronouns precede accusative and dative pronouns, unless they are relative.

Accusative Pronoun (Direct Object)

		Pre-Nom.				Pre-Dative			
		Noun	Pronoun			Noun	Pronoun		
45	(56)	7.1	16.1	=	23.2	3.6	1.8	=	5.4
116	(25)	20.0	12.0	=	32.0	4.0	0	=	4.0
76	(34)	29.4	11.8	=	41.2	0	2.9	=	2.9
103	(85)	5.9	15.3	=	21.2	1.2	3.5	=	4.7
137	(64)	9.4	14.1	=	23.5	4.77	0	=	4.7
34	(36)	19.4	8.3	=	27.7	0	16.7	=	16.7
53	(81)	12.3	8.6	=	20.9	3.7	0	=	3.7
51	(90)	4.4	10.0	=	14.4	0	4.4	=	4.4

		Post-Nom.				Post-Dative			
		Noun	Pronoun			Noun	Pronoun		
45		8.9	62.5	=	71.4	1.8	1.8	=	3.6
116		24.0	44.0	=	68.0	0	0	=	0
76		14.7	44.1	=	58.8	0	0	=	0
103		15.3	62.4	=	77.7	0	1.2	=	1.2
137		23.4	51.6	=	75.0	0	1.6	=	1.6
34		19.4	50.0	=	69.4	0	5.6	=	5.6
53		23.5	48.1	=	71.6	1.2	2.5	=	3.7
51		18.9	57.8	=	76.7	0	1.1	=	1.1

Accusative pronouns seem less stable than most elements (probably because the relative pronoun has been included) and precede nominative nouns and pronouns between about a fifth and a third of the time.

1. Accusative pronouns generally follow nominative nouns and pronouns, unless they are relative.
2. Accusative pronouns precede dative nouns. (This is true for Modern English too.)
3. Accusative pronouns do and do not precede dative pronouns.

Dative Pronoun (Indirect Object)

		Pre-Nom.				Pre-Acc.			
		Noun	Pronoun			Noun	Pronoun		
45	(26)	7.7	7.7	=	15.4	11.5	3.8	=	15.3
116	(5)	40.0	0	=	40.0	30.0	0	=	30.0
76	(13)	38.5	0	=	38.5	0	0	=	0
103	(28)	21.4	7.1	=	28.5	14.3	3.6	=	17.9
137	(67)	6.0	3.0	=	9.0	26.9	0	=	26.9
34	(13)	7.7	15.4	=	23.1	46.2	0	=	46.2
53	(24)	0	0	=	0	33.3	8.3	=	41.6
51	(14)	7.1	0	=	7.1	14.3	0	=	14.3

		Post-Nom.				Post-Acc.			
		Noun	Pronoun			Noun	Pronoun		
45		23.1	57.7	=	80.8	3.8	3.8	=	7.6
116		30.0	30.0	=	60.0	0	0	=	0
76		0	53.8	=	53.8	0	7.7	=	7.7
103		25.0	46.4	=	71.4	0	3.6	=	3.6
137		38.8	49.3	=	88.1	10.4	0	=	10.4
34		23.1	53.8	=	76.9	0	30.8	=	30.8
53		8.3	91.7	=	100.0	4.2	0	=	4.2
51		28.6	64.3	=	92.9	0	21.4	=	21.4

(The same restriction applies to the dative pronouns as to the dative nouns concerning the lack of direct object.) The number of dative (indirect object) pronouns analysed is too small really to be of any great significance. Although in the earlier texts the dative pronoun sometimes precedes the nominative noun and pronoun, in the later texts (Nos. 53 and 51) it almost always follows the nominative noun and always follows the nominative pronoun. It regularly precedes the accusative noun, but seems to have taken up the position following the accusative pronoun after an initial period of variability.

1. Dative pronouns generally follow nominative nouns and pronouns, unless they are relative.
2. Dative pronouns precede accusative nouns.
3. Dative pronouns initially preceded and followed accusative pronouns but eventually followed this pronoun.

The following table shows the percentage of nominative, accusative and dative nouns and pronouns that precede the verb. The figures below each category represent these percentages.

	Nomina- tive Nouns	Accusa- tive Nouns	Dative Nouns	Nomina- tive Pronouns	Accusa- tive Pronouns	Dative Pronouns
45	76.0	46.2	71.4	91.1	78.6	88.5
116	52.4	17.2	20.0	83.1	56.0	100
76	70.2	45.6	41.2	88.5	85.3	69.2
103	58.4	52.7	40.0	81.7	81.2	57.1
137	61.4	25.5	14.3	93.5	56.3	65.7
34	60.2	19.0	25.0	97.2	61.1	53.8
53	75.3	3.6	15.4	96.8	45.7	41.7
51	58.8	11.8	0	89.6	31.1	35.7

Pronouns in general tend to precede the verb. Accusative and dative pronouns precede the verb to a greater extent and for a longer period than do accusative and dative nouns. Between one half and three quarters of nominative nouns precede the verb regularly, whereas between 8 and 9 tenths of nominative pronouns precede the verb. An interesting comparison suggests itself here with the Modern French pronominal pattern, where all the pronouns regularly precede the verb, e.g. je le lui ai donné. However, it is felt that the relative positions of subject, direct object and indirect object are more important than the relative positions of these elements to the verb. The element tha, which often inverts subject and verb in Early English, occurs equally before nouns and pronouns.

Adjectives

Adjectives almost always directly precede the noun, unless they are in the predicate or are 'special', e.g. sylf.

The following table illustrates the percentage of adjectives that occur directly after other adjectives; in other words these are almost always weak, since they follow demonstratives, which have been counted as adjectives. Again the figures in brackets represent the numerical totals, whilst all other figures are percentages.

	Nominative Adjectives	Post-Nom. Adjectives	Accusative Adjectives	Post-Acc. Adjectives	Dative Adjectives	Post-Dative Adjectives
45	(93)	17.2	(72)	12.5	(97)	16.5
116	(60)	23.3	(38)	21.1	(54)	11.1
76	(129)	18.6	(61)	16.4	(94)	18.1
103	(82)	14.6	(106)	21.7	(118)	17.8
137	(167)	15.0	(116)	19.0	(183)	20.8
34	(96)	29.2	(80)	17.5	(125)	16.0
53	(90)	22.2	(78)	15.4	(94)	18.1
51	(59)	18.6	(85)	16.5	(88)	20.5

Thus, for example, 93 nominative adjectives are analysed in text 45 and 17.2% occur after another nominative adjective (ie. nearly always a demonstrative), whilst in the same text 72 accusative adjectives are analysed of which 12.5% occur after another accusative adjective (ie. nearly always a demonstrative). Thus the percentages given above indicate to a very large extent weak adjectives.

These figures clearly show that OE word-order was not completely free and certainly not as free as one might be led to expect by Fries' figures cited on page 31. In sentences with, say, a nominative adjective and noun and an accusative adjective and noun, one could predict the order with a considerable degree of certainty even in the earlier texts.

C h a p t e r 6

The forms which have lost distinctive case.

Case distinctions in OE are not present in all grammatical categories as can be seen from a glance at Sweet's Grammar. The noun declensions present the greatest difficulty, since they are fairly varied and plentiful. Pronoun and adjective declensions, on the other hand, are regular by comparison to nouns. Nouns are more susceptible to analogy, as has been pointed out before (cf. *bec/boke*), because (a) the declension types get confused and (b) because of the loss or confusion of gender distinctions, e.g. (No. 45, p. 164, line 23) Thaet ilce Dryhten God..., where one would expect se ilca Dryhten God. Analogical formations are not part of the redundancy hypothesis and thus judgements on nouns should be made with some care.

Not all categories are marked by a distinctive case ending and these are of little importance to this analysis, e.g. there is no overt distinction between nominative and accusative nouns of the strong declension, e.g. stan (stone). First and second person pronouns make no distinction between the accusative and dative forms, e.g. me/me. Thus obviously, the more marked categories are the ones that will be subjected to most changes and will come under closer investigation. For typing convenience OE *þ* and *ð* are represented as th, and OE z (pronounced *y*) is retained as z.

Procedures

Each text will be reviewed individually with reference to "ungrammatical" forms. The "correct" form will be placed in brackets after the example. The reference comes directly after the example. The figures before the full stop indicate the page number and those after indicate the line number.

No. 45

Predictably this text contains few examples of confusion or loss of distinctive case.

Dative Noun

1. thonne hie ne gesyngath of unbieldo (unbielda). 158.1

Dative Pronoun

1. he thonne sceal fleon to anra thara threora burga (anre). 166.2
2. Se to anra thara burga geflihth (anre). 166.20
(thaet he fleo to thara threora burga anre) 166.17

These examples are interesting because the pronoun has obviously taken on its final vowel from the juxtaposed genitive adjective.

Nominative Adjective

1. Gethence, hwelc witu us tha becomon (hwelciu). 4.4
2. Thaet ilce Dryhten God us bisnade (se ilca). 164.24

No. 2 is an example of confusion of gender.

Dative Adjective

1. we noldon ... mid ure mode (urum). 4.18
2. tha snicendan licgeath mid ealle lichoman (eallum). 152.18
3. Hwaet elles meahte beon getacnod thurh Ezechiel buton tha
scirmenn & thurh thone wah sio heardheortnes... (tha / thaere). 152.23

Example 3 is very interesting because, although buton may or may not take the dative in this case, the preposition does not affect the second adjective sio, presumably because it is at some distance from the preposition. This example parallels the example of who/whom (see p. 27) and is directly opposed to the redundancy hypothesis. The other examples here are not really indicative of any tendency, since they are so few.

No. 116

This text, too, has few examples.

Genitive Noun

There are two instances of a name remaining undeclined. However, since the name (Stephanus) is Latin, this is not really surprising.

Nominative Adjective

1. tha ateawdon swylc tacn mannum (swylciū). 2.11

Accusative Adjective

1. Romanan gesawon gylden cleowen (gylde). 2.14
- gylden is in fact the weak form of the adjective.

Dative Adjective

1. manig geseah lamb spaecan on mennisc gecynde (menniscum). 2.19
2. thaet we sceolan aceorfan fram usse heortan (urum). 12.13

Strong adjectives are usually declined, e.g. on nihtlicre gesihthe.

The possessive adjective ure is never declined for the dative in this text.

Genitive Adjective

1. tha genam heo sancte Adrianes hand (sanctes). 34.8

Here again sancte is clearly Latin and cannot really be expected to conform to the normal strong genitive adjective singular /-es/ or /-re/.

No. 76Accusative Noun

1. Se faeder with-soc his bearne and thaet bearn with-soc thone faeder (bearn). 494.110

Dative Noun

Frequently it is hard to tell whether a noun governed by a preposition is in fact dative or accusative, especially when motion might be implied, e.g.

tha braethas stigon upp geond tha byrig (burg). 490.37

byrig is in fact the dative of burg but in view of the adjective which has the feminine accusative form, it is very hard to determine the case.

... and flugon eft into thaere byrig 492.79

This is an example of both dative adjective and noun taking the "correct" form; however, since burg (accusative) does not occur in the text, we should assume that no distinction was made any more between the dative and accusative forms of the word.

1. hi onsaegednyssa deoflan offrian woldon (deofle). 496.133
- (...aelc man... deofle sceolde offrian) 488.28
- (thaet hi mid heom deofle on hand gangan sceoldon) 490.59

This example deoflan is very interesting, since in all the other cases we have deofle; however, in these other cases there is no accusative noun. Thus it seems that, where a confusion might arise between accusative and dative nouns, the dative noun is marked in a highly distinctive way.

Dative Pronoun

1. thaet hi mid heom ... gangan sceoldon (pl. him) 490.59
2. and heom for an tha witu gemynte waeron (pl. him) 494.112
- (hi hi utdrifon and him beforan feredon) 490.56

Gradually the singular /plural distinction is being made between dative pronouns (him / heom).

Nominative Adjective

1. Gif hwylc gedwola oththe awothod man ... (awothoda) 12.20
2. Se the is healic godnisse (healicu) 16.90
3. eall seo burh-warū ... com (eallu) 490.32
4. ... eall seo burh-warū ... (eallu) 496.132

The form awothod in No. 1 is in fact "correct", if it is assumed to be strong, i.e. not dependent upon hwylc.

Dative Adjective

1. tha braethas... stigon upp on aelce healfe (aelcre) 490.37
2. tha haethenan on swilcon deofolscinne blissedon (swilcum) 490.39
3. the on aelce healfe hangedon (aelcre) 494.102
4. to hwaetheran hlafordscipe he wolde gebugan (hwaetherum) 494.116

Examples 2 and 4 are probably cases of confusion between weak and strong adjectives. Again, the examples are few in this text; however, the examples given above of deofle/deoflan are very interesting, although the investigation required to deal with it lies outside the scope of this work.

The following texts have a far greater proportion of forms with confused case-endings, and therefore it is not practicable to give the whole clause in each case, but rather general patterns will be sought. Once again nouns present the greatest difficulties because of analogical formations.

No. 103Accusative Noun

1. thas zyrdæn tacnaeth faeder and sune (sunu) 2.17
2. th heo thone lichame azyfen scolde (lichaman) 30.2
3. thaet heo thone lichame leng dreccen scylon (lichaman) 30.8
4. th heo thaesne lichame swithe cwylmdon (lichaman) 30.6
5. cedrus tacnaeth thone sunæ (sunu) 16.3
6. tha naefden heo nane scypaen (pl.) (scipu) 18.28
7. Tha the heo to heoræ husæ (pl.) comen (hus) 18.4
8. tha feng the lez... zeond alne thene lichame (lichaman) 18.13

Most of the nouns above belong to one of the smaller declension types; however, nouns belonging to the same declension type as lichama do occasionally take final /n/ in the accusative, e.g.

th ich thine willaen zefremme 6.23

Example 5 clearly reveals that the scribe had little or no feeling for the case system, since the final vowel of sunae is obviously the result of the scribe's ignorance and has been put in for the sake of form.

Dative Noun

These are represented by equally varied declension types.

1. tha comen heo in to thare burh (burhe) 4.29
2. th hus wearth...on brune of thare thruh (thruhe) 30.12
3. sone swa heo tham deade neahlaehte (deadan) 32.30
4. the he on his lichame haefde (lichaman) 20.14
5. Ic halsize the on godes almihtizes nome (noman) 20.18
6. Ant he tha for godes lufen him hors finden het (lufe) 20.20

Otherwise dative nouns still retain a distinctive singular ending in /-e/ or a plural ending in /-um/, e.g.

1. tha ferdan tha yldestan craeftezen to tham halzan treowe 22.21
2. tha laezdon heo th met up to tham othre beamum 22.25

Nominative Pronoun

Both feminine singular and all third person plural pronouns are represented by heo. However, they are regularly distinguished by the verbal inflection.

Accusative Pronoun

The third person plural form for all genders is regularly heom, e.g. he sylf heom forth laedde 2.19 The feminine singular form is hire, e.g. ure drihten sylf hire (tha rode) ut of tham temple ber 32.4 The masculine singular form remains hine .

Dative Pronoun

The third person plural form is also heom, whilst the masculine singular form is him and is thus distinguished from hine. The feminine singular form is, however, also hire and is thus not distinguished from the accusative form,

Nominative Adjective

1. tha stoden tha ylcae zyrden abuten him (ylcaen) 2.15
2. tha th wife th ihyrde (theo) 30.4
3. th hus wearth (thaet) 30.11
4. tha arleasae iudei hine hon wolden (arleasaen) 30.24
5. tha... tha sancta helena to hierusalem com (theo sancte) 32.8
6. ... theo haliz rod ifunden waes (halize) 34.7
7. thaet of heom monizae wundrae iwordene beoth (monizu) 16.9
8. gif the mildheorte god inc thaes zeunnaen wullae (mildheorta) 16.22
9. tha wurdon tha tweze cnihtaes... (twezen) 18.22

Most of the "incorrect" forms here are the weak forms; obviously examples 2 and 3 are cases of scribal practice. Weak adjectives are still used "correctly", however, e.g. Tha ferdan tha yldestan craeftezen ... 22.21

Strong adjectives and demonstratives are mostly used "correctly"; example 5 is, of course, an exception.

Accusative Adjective

Here too it is most frequently the weak adjective that is not inflected, e.g.

1. thas zyrdæn tacniaeth thone halza gast (halzan) 2.17
2. th heo thine halza name forwitegode (halzan) 30.7
3. and (heo) tha halzae rode therof wrohten (halzan) 32.3
4. this waes all idon on thone ilcae frizdae (ilcan) 32.5
5. tha sancta helena... com and tha halza rode saecgan
ongan (halzan) 32.8

Not all the examples will be cited; however, the table will furnish this information. Again occasionally the weak adjective is inflected distinctively, e.g. thone feorthan dæl heo mid hire haefde

Dative Adjective

Here too weak adjectives are frequently not inflected. Only the nominal phrase will be cited.

- | | | |
|-----------------------------------|--------------|-------|
| 1. ofer tham <u>raede</u> sae | (raedan) | 2.5 |
| 2. on thare <u>forme</u> nihte | (forman) | 2.7 |
| 3. on tham <u>ylca</u> stude | (ylcan) | 2.8 |
| 4. mid <u>mucele</u> arwurthnesse | (mucelre) | 32.21 |
| 5. on thone <u>ilce</u> daeze | (tham ilcan) | 34.2 |
| 6. of <u>thæt ylce</u> watere | (tham ylcan) | 4.25 |
| 7. mid <u>lude</u> stefne | (ludere) | 4.16 |

The weak adjective is, however, inflected, e.g. mid tham israelitiscan folce.

The strong adjective (i.e. other than demonstratives) is frequently not inflected, e.g. Nos. 4 and 7. No. 5 is a very interesting case, since the phrase should either be on thone ilcan daez (Accusative) or on tham ilcan daeze (Dative). Obviously the confusion of case is considerable at this stage.

As far as the word-order patterns of the "case-loss" forms are concerned, it is only in the environment of the adjectives that there are any distinctive differences between the word-order patterns of the "case-loss" forms and the word-order patterns of all the adjectives in general. Of a total of 11 nominative adjectives that had lost the distinctive case marking, 54.4% occurred after another adjective, e.g. theo haliz rod; in other words weak adjectives appear much more likely to lose the distinctive case marking. Of all the nominative adjectives only 14.6% occurred after another nominative adjective, (i.e. almost always a demonstrative).

Of a total of 25 accusative adjectives that had lost the distinctive case marking 64% occurred directly after another accusative adjective, whereas of all the accusative adjectives only 21.7% occurred after another accusative adjective.

Of a total of 23 dative adjectives that had lost the distinctive case marking 47.8% occurred directly after another dative adjective, whereas of all the dative adjectives only 17.8% occurred directly after another dative adjective.

Although the actual numbers of "case-loss" forms are not very great, the numbers of weak adjectives, i.e. post-adjectival, that have lost distinctive case lie between 47.8% and 64% of all the adjectives that have lost distinctive case, which is significantly greater than the percentage that is normally in this environment. Otherwise the environments are very similar.

No. 137

Nominative Noun

1. th his sune leofede (sunu) 22.22

There are only four nouns here, three of which are sune, the other being Iudeisce (pl.) where one would expect Iudeiscan, i.e. tha Iudeisce utlazedon aelcne.

Accusative Noun

This group consists largely of the form sune, where one would expect sunu. There are only 10 nouns in this group.

Dative Noun

Most dative nouns still have the distinctive ending in /-e/ singular or /-um/ plural, e.g. deofle, monnum; 14 nouns do not, however, e.g.

1. th he mid tham festen beten thurfte (festene) 96.12
2. aefter tham faesten he wear th mid wisdomes gaste ifulled (faestene) 98.16
3. he alle isceaftae isceop... summe to engles summe to monen (englum) 78.29
(Sothlice ne sceole we us biddaen... to englum...) 104.16

Nominative Pronoun

Again both third person feminine singular and third person plural have the form heo, e.g.

1. heo (pl.) laeddon hine... 60.11
2. heo syththan axodon eft thon ihaelede mon 60.18

It is interesting to note that the verb with the plural pronoun heo always has a distinctive plural ending. There are, however, five instances of plural-pronoun-verb inversion, where the verb does in fact lose the distinctive ending, e.g.

1. Ne sceole we nenne mon bylzen. 106.3
2. Buton ze hit ilefaen, ne maze ze hit understanden. 80.16
3. Sothlice ne sceole we us biddaen ... 104.16
4. thenne axie we him ... 80.26
5. Ne maze ze 78.21

In the commoner order, i.e. subject-verb, the verb is always distinctively marked after a plural pronoun, e.g.

1. he walde th we wisten. 98.2

The above examples are in part opposed to the redundancy-hypothesis, since, according to the hypothesis, the verb should lose its distinctive inflection for plurality when it occurs in its usual position after the pronoun. The fact that the loss of distinctive inflection only affects 'unambiguous' pronouns supports the hypothesis.

Accusative Pronoun

Both forms him and hine occur in this text, e.g.

1. the Halize Gast him on the waesten laedde 96.27
2. the him syththan acwaldon 78.22

3. tha tha heo him axodon ... 78.22
 4. thenne axie we him ... 80.26

The following clauses employ hine.

1. the warizede deofol hine thaer... costniaen ongon 96.26
 2. ac he hine ofercom mid mennisce rihtwisnesse 102.19

him occurs only four times; hine is the commoner form, occurring 26 times.

Dative Pronoun

Again heom is used throughout as the plural form.

Nominative Adjective

The weak adjectives are often not distinctively marked, although some are, e.g.

1. the Halzae Gast ne ongan naefre 82.4
 2. thaet the leofae Haelend mihte his sune haelen 26.2

The following examples are not distinctively marked.

1. the Halize Gast him ... laedde (Haliza) 96.27
 2. the warizede deofel hine costniaen ongon (warizeda) 96.26
 3. se Almihtiz Faeder, he streonde aenne sune ... (Almihtiza) 78.32

Only two "incorrect" adjectives are not weak.

1. Thu eart aethele lareow... (aethel) 2.21
 2. Tha nam the deofel thene Haelend on thaere halzan buriz and
 sette hine ofer thaes temples yppan thaer thaere lartheawselt
 waes (the) 100.21

The second example is worthy of note. Obviously the nominative adjective belonging to the noun lartheawselt ('pulpit') has been affected by the juxtaposed adverb thaer. Thus, although the adjective thaere has the same form as the feminine, genitive singular or feminine, dative singular, it is obviously subjective (nominative) in notion.

Accusative Adjective

All the weak adjectives remain uninflected, e.g.

1. Crist tholedede... thene awarizede deofel (awarizedan) 96.19
2. yle mon sceolde... thone teothe dael... Gode syllen
(teothan) 106.9

All the demonstrative adjectives remain fully inflected, except in two cases where the letter th only is used as a result of scribal practice, e.g.

1. Elias feste eac th ilce festen (thaet) 98.13
2. aelc mon maez... th ece lif earniaen (thaet) 106.1

Dative Adjective

Both weak and strong adjectives may be inflected or uninflected.

The following are examples of inflected weak and strong adjectives.

- weak
1. he awende water to wine six fate fulle mid tham fyrmostan wine 22.10
 2. his cnapae wearth ihaeled on thare ylcan tide 26.21
 3. thaet hine forlet theo feofer on thare ylcan tide 28.12

- strong**
1. on hwylcere tide the sune zewurpte 22.23
 2. he hine... on ecere yrmthe bringaeth 104.8
 3. Ure Haelend com hwilon to Chanan tham tune on
Galileiscere scire 22.8

The following are examples of uninflected weak and strong adjectives.

- weak**
1. we wullaeth eow saeggan bi thare halzae tide (halzan) 96.5
 2. Tha andswerede Crist tham awarizede gaste (awarizedan) 102.15
 3. he waes aefre God of tham Almihtiz Faeder (Almihtizan) 80.2

- strong**
1. the nu earniaen wyllaeth mid gode weorcum (godum) 98.4
 2. He wyle mucel habbaen of al moncynne (allum) 78.11
 3. Crist mihte... mid ane worde thenne deofel senden (anum) 102.17

All demonstrative adjectives are fully inflected, except in one case, e.g.

the... to us com nu to-daez... acenned of Mariae thet halize maeden
(tham halzan maedene) 78.5

This example is another case of nouns and adjectives governed by a preposition but not by the case of the preposition, being at some distance from the preposition (in this case a parenthetical expression). Obviously the scribe had no 'feeling' for case here. It is interesting to note as far as the adjectives are concerned that they often lose the distinctive inflection when weak, but do not lose this inflection, when used weak as a noun, e.g.

1. heo laedden hine to tham sunderhalzan... (dative) 60.11
2. the axodon tha sunderhalzan eft (nominative) 60.13
3. He cwaeth tha to tham unleafullum (dative) 60.14
4. tha wearth thaer flit betwyx tham sunderhalzan (dative) 60.18
5. Tha andswerede the ihaelede mon tham heardheortan (dative) 62.8
6. the sothfeste God tha sunfullen ne zehyrth (accusative) 62.11

This is a remarkable phenomenon revealing the environmental and categorical

factors that play a role in the determination of case-loss. It would seem that true adjectives can afford to lose a distinction but cannot afford to do so when used nominally. This finding supports the hypothesis, since the weak adjective used adjectivally depends for support on the noun, but when used nominally it has to carry more of the grammatical features itself. The categories of greatest interest here are: accusative pronoun, nominative, accusative and dative adjective.

Accusative Pronoun

Unfortunately there are only four examples of accusative him, three of which are pre-verbal; all four occur after the subject. However, again, only a large comparison of the environments of him and hine would be of any use.

Adjectival Distribution

The following table illustrates the main distribution of nominative, accusative and dative adjectives, that do not have a distinctive case ending. All the figures except for the totals are percentages. The percentages in brackets are those of the complete word-order analysis, e.g. below the heading nominative adjective the first line reads:

pre-nominative noun 100 (89.2)

this means that 100% of the nominative adjectives, that do not have a distinctive case ending, occur directly before the noun, whereas in the total word-order analysis only 89.2% of nominative adjectives occurred directly before the noun.

Nominative Adjective - Total 16

pre-nominative noun	100 (89.2)	post-nominative noun	0 (4.2)
pre-nominative adjective *	0 (15.0)	post-nominative adjunct.*	87.5 (15.0)
pre-accusative noun	25 (23.4)	post-accusative noun	0 (0)
pre-accusative pronoun	12.5 (7.8)	post-accusative pronoun	0 (3.6)

Accusative Adjective - Total 17

pre-accusative noun	100 (96.6)	post-accusative noun	0 (0)
pre-accusative adjective *	5.9 (19.0)	post-accusative adjunct.*	82.4 (19.0)
pre-nominative noun	0 (0)	post-nominative noun	59 (41.4)
pre-nominative pronoun	0 (3.4)	post-nominative pronoun	41 (55.9)

Dative Adjective - Total 71

pre-dative noun	95.8 (96.7)	post-dative noun	2.8 (1.6)
pre-dative adjective *	9.9 (20.8)	post-dative adjective *	38.0 (20.8)
pre-nominative noun	1.4 (2.7)	post-nominative noun	32.4 (40.4)
pre-nominative pronoun	0 (1.6)	post-nominative pronoun	63.4 (54.6)

* It must be remembered that demonstratives have been counted as adjectives.

This table demonstrates that weak adjectives (i.e. those following a demonstrative) are far more prone to lose a case distinction than are strong adjectives or demonstratives. In fact, demonstratives seem to be peculiarly resistant to case-loss; they regularly carry stress. There are not really enough examples of accusative and nominative adjectives; however, there are 71 dative adjectives which have lost a case distinction, of which 38% occur directly after another dative adjective, whilst in the complete word-order analysis only 20.8% occur directly after another dative adjective.

Only 9.9% of dative adjectives that have lost a case distinction occur directly before another dative adjective, whereas in the complete word-order analysis this percentage is, of course, 20.8. This fact bears out the statement made earlier that demonstratives seem peculiarly resistant to case-loss, since they occur in initial position in the nominal phrase. The fact that weak adjectives are highly susceptible to case-loss, but that demonstratives are not, could be construed as an argument in favour of the redundancy-hypothesis, since weak adjectives have a highly stratified position between elements that are often very distinctively marked for case. Otherwise there are no great differences between the figures for the case-loss forms and those for the complete word-order analysis.

No. 34

This text has a fairly large number of forms with and without distinctive case. Again nominative and accusative nouns, although revealing many individual differences, are hard to analyse because of the workings of analogy.

Dative Nouns

These present fewer problems in this text because in general the endings are: singular in /-e/ and plural in /-en/ or /-um/, e.g.

1. From than halie hesterdei both italde fifti daza to thisse deie 87.1
2. thet heo schulden offrien gode an lomb 87.6
3. tha com the mon mid his gersume to than apostolum 91.35
4. heo... ongunnen to spoken mid mislichen spechen 89.27

It is interesting to note that in sentence No. 1 both uninflected (hesterdei) and inflected (deie) dative nouns occur.

The uninflected forms of the dative noun follow:

1. Tha fram tham estertid flifti daza... (estertide) 87.18
2. Lucas awrat on there boc... (bec/boke) 89.17
3. ... and fuleden tham apostles (apostlum) 89.17
4. the halia gast was isezen bufan tham apostlas (apostlum) 95.18

The environment for the dative noun without distinctive case is as follows: the figures in brackets represent the complete word-order analysis. All figures are percentages, unless otherwise stated.

Of a numerical total of 34 uninflected forms, 80% are governed by a preposition, and thus the environment vis-à-vis the direct object is of small importance.

pre-nominative noun	5.9	(6.3)	post-nominative noun	47.1	(46.2)
pre-nominative pronoun	8.8	(1.4)	post-nominative pronoun	38.2	(36.7)
pre-dative adjective	0	(0)	post-dative adjective	70.6	(45.2)
pre-preposition	0	(0.5)	post-preposition	80.0	(87.8)

The only significant difference between the environments lies in the post-dative adjective position; in the complete word-order analysis 45.2% of dative nouns directly follow a dative adjective. Of the forms that have lost distinctive case, 70.6% follow a dative adjective. Thus it would appear that dative nouns are more likely to lose distinctive inflection when following an adjective. Furthermore it is frequently true that where the adjective is distinctively inflected, the noun is not, and where the noun is distinctively inflected, the adjective is not, e.g:

Adjective Inflected, Noun Uninflected

1. hu the helend nehlechde to-ward... thare burh (burhe?) 3.4
2. moni of than floc manna (floce) 3.18
3. ... of there burh... (burhe?) 3.19
4. and efere to tham setteres dei heo comen (deie) 9.6
5. From than halie hesterdei... (deie) 87.1
6. ... fram than estertid (estertide) 87.3
7. Tha fram tham estertid (estertide) 87.18
8. ... on there boc (bec/boke) 89.17
9. ... mid than halie gast (gaste) 89.27
10. ... and fuleden tham apostles (apostlum) 91.17
11. ... bi there stret (strete) 91.27
12. ... bufan tham apostlas (apostlum) 95.18
13. ... mid then halia gast (gaste) 89.27

The distinction between the masculine singular accusative and dative demonstratives (thone-tham) is not always maintained, and it could be argued that in example No. 5 the case of the demonstrative and noun is accusative; this is unlikely because the preposition fram only takes the dative in previous texts, and furthermore in No. 7 the case of the demonstrative is clearly dative, i.e. fram tham.

Adjective Uninflected, Noun Inflected

1. mid ufele theonke (ufelum) 3.17
2. on riche stede (richum) 5.20
3. on thisse gastliche dazen (thissum gastlichen) 11.11

4. to muchele helpe (muchelum) 11.13
5. uppon the munte (tham) 11.14
6. on ane dele (anum) 223.11
7. on thine weorcum (thinum) 223.35
8. of the clene meidene (tham clenan) 227.32
9. mid dreie fotum (dreium) 229.6
10. bi tha honden (tham) 41.21
11. bi the tunge (tham) 41.21
12. bi the ezen (tham) 41.21
13. mid alle spechen (allum) 93.28

Mostly demonstrative adjectives remain inflected, whatever the environment may be, although not in examples 5, 10, 11 and 12. Obviously the number of examples cited here is not sufficient to prove any point; however, the tendency is clear enough. Examples can be found where both adjective and noun are inflected, and where both adjective and noun are uninflected.

Adjective and Noun Inflected

1. in there strete 7.12
2. mid than blode 87.6
3. of elchan hiwscipe 87.6
4. of tham londe 87.10
5. on thissere worlde 95.11

Adjective and Noun Uninflected

1. to ure drihten (urum drihtne) 5.36

2. in the halie godspel (tham halian godspele) 79.2
3. of two brondes (twam bronden) 81.3

Of course, there is no way of determining the case of the above examples for certain, since the forms are essentially 'caseless'. However, the prepositions in and of do generally take the dative in this text.

There are relatively few examples of this last type; however, to determine absolutely the numbers of uninflected nouns and adjectives and the numbers of inflected nouns and adjectives and the degrees to which they co-occur, a two-way contingency test has been set up. Where two adjectives precede a noun and one of them (generally the demonstrative) is inflected, the adjectives have been taken as a unit and are regarded as being inflected. Where it is impossible for the noun to be inflected, e.g. nouns ending in -esse, the whole phrase has been ignored. The figures in each case are numbers not percentages.

	Adjective inflected	Adjective uninflected
Noun inflected	36	55
Noun uninflected	17	8

Tested by the χ^2 test the probability of arriving at this result by chance is less than 0.01 (see K. Mather, Statistical Analysis in Biology, p. 174, et seq., 1951).

Thus some sort of a pattern is obviously operating in this text as far as dative nouns and adjectives go. A much more exhaustive type of analysis would be required with many more controls than have been applied here in order to be absolutely certain of this result. However, if this

result were repeated with all the controls (i.e. using the text of one scribe alone, choosing a clearly defined type of adjective and noun etc.) and a larger amount of material, then the redundancy hypothesis would be substantially supported in many instances, since marked dative nouns are redundant when following a marked dative adjective and vice versa.

Nominative Pronoun

ho, heo and hi are found as the plural forms, although in different sections of the text. There appear to be no conditioning factors. There are cases where the verb is not inflected for the plural.

1. Swice hi godes were 227.10
 2. hi were mid than fellen zescridde 225.1
 3. heo hit delden elchum alswa heo neode hefde 91.19
(heo hit delden elchum alswa heo neode hefden) 91.25
 4. heo nomen heore clathes and the beste thet heo hefde 3.20
 5. ... and over alle thing hine ze scule wurpian... 11.23
- In example 5 the pronoun is, of course, ze.

Accusative Pronoun

Both him and hine are the masculine singular forms. Unfortunately there are relatively few examples.

1. ho him bireveden and ho him ferwundeden and letten hine liggen... 79.5
2. thet him aer luvede 79.27
3. ho him ferwundeden 79.5
4. ah crist hine tende mid holde mode 81.15
5. tha com ther an helendis mon... and brohte him huppon his werue
and brohte him to an hors huse and bitahte hine the hors horde. 79.9

Example 5 is interesting because hine is used when an indirect object (the hors horde) is involved. However, the paucity of examples allows no general statements; although it should be noted that in example 1 the form him precedes the verb, whilst hine follows the verb.

Dative Pronoun

him is also the third person masculine singular form in this category; however, in each instance of its occurrence it is either directly governed by the verb or a preposition, which rules out a comparison with the accusative pronoun him.

Nominative Adjective

Most of the obvious cases of variance are found in the weak adjectives, e.g.

- | | | |
|--|-------------|--------|
| 1. forthon that the <u>almihti</u> god ... | (almihtiza) | 97.35 |
| 2. the <u>alde</u> mon bith iliche ... | (alda) | 109.9 |
| 3. the <u>riche</u> mon (bith) butan elmsdedan (richa) | | 109.28 |

as opposed to:

- | | |
|---|-------|
| 1. that is the <u>fiftutha</u> dei | 87.2 |
| 2. hu the <u>halia</u> gast ... com ... | 89.15 |
| 3. the <u>heolia</u> gast wes isezen ... | 93.35 |
| 4. for-thon wes the <u>halia</u> gast ... | 95.10 |

Most of the strong adjectives and demonstratives retain a distinctive inflection.

Accusative Adjective

The demonstratives here generally retain an inflection distinct from the nominative but in many cases not distinct from the dative, e.g.

Accusative - thu havest ilozen than halie gast 91.36

Dative - from than halie hesterdei 87.1

The weak form has both inflected and uninflected endings, e.g.

1. heo underfengon thene halian gast 91.30

2. thu havest ilozen than halie gast 91.36

Strong adjectives, too, frequently retain the inflected ending, but not always, e.g.

1. hi woldan wercen... enne stepel swa hahcne... 227.1

The distribution for the accusative adjective is as follows:

24 adjectives have lost distinctive case.

pre-accusative noun	95.8 (95.0)	post-accusative noun	0 (1.3)
pre-accusative adjective	8.7 (17.5)	post-accusative adjective	41.7 (17.5)
pre-nominative noun	0 (3.8)	post-nominative noun	21.7 (30.0)
pre-nominative pronoun	4.3 (1.3)	post-nominative pronoun	73.9 (60.0)

Once again the significant difference lies in the category post-accusative adjective.

Dative Adjective

Both weak and strong adjectives occur inflected and uninflected, with the reservation that the distinction between accusative and dative demonstratives is sometimes lost.

Inflected (weak)

1. of tham egiptissen folche 87.9
2. on tham ercan to-cume 95.15

Inflected (strong)

1. mid muchlere blisse 87.16
2. mid mislichen spechen 89.27

Uninflected (weak)

1. on there ilke nihte (ilkan) 87.7
2. to than heofenliche biboden (heofenlichen) 95.23

Uninflected (strong)

1. mid druze fotan (druzum / druzen) 87.12
2. on elche huse (elchum / elchum) 87.8

The environment of the dative adjective has been partially explained with reference to the dative noun. The percentage of uninflected dative adjectives occurring directly after another dative adjective is 24.6, whereas in the total analysis this percentage is only 16. The numerical total of uninflected dative adjectives is 114. The other environments will not be given, since they are not considered relevant.

Texts 51 and 53 have only been analysed for the word-order patterns and not for case endings which have almost completely disappeared, except for the occasional dative noun and, of course, the pronouns.

CHAPTER 7

Conclusions

Unfortunately the extremely complicated nature of the work entailed by the hypothesis was not appreciated initially. Although the hypothesis is simple, its application requires controls and information not incorporated into this work. Perhaps the whole approach is too ambitious, encompassing too many categories that have anyway not been sufficiently analysed. One of the greatest problems encountered was the marking of 'uninflected' or 'ungrammatical' forms. Basically each individual text needs its own grammar with a complete listing of all the various forms in each category. In this way it would be possible to find out which distinctions were really being maintained despite scribal practices and the workings of analogy.

The word-order analysis did not serve the purpose intended in all cases, although it did show that early English word-order patterns are more stable than has been generally supposed. It is interesting to note that the word-order patterns of texts 53 and 51, i.e. the two latest texts in which case marking is rare, do not differ widely from the word-order patterns of the six earlier texts in which case marking is common. This observation supports the view that word-order was stratified to a great extent before the loss of case.

The adjectives proved to be the most fruitful general category, mainly of course, because they are the most highly inflected. The weak adjectives lose the inflection (-n) first of all; strong adjectives retain inflections to a greater degree and demonstratives are the most

durable in this respect. Obviously factors other than redundancy play a role. However, weak adjectives are in syntactically highly marked positions and are more likely to succumb to phonetic processes as a result. It was not found that, say, accusative adjectival inflection was lost more frequently in the position after the subject; perhaps this was due to the fact that not enough material was studied in each text. Approximately 2500 - 3000 words were analysed in each text and this was not sufficient. However, the problems encountered and the time available limited this quantity. The results point to possibilities for further research, although they are not conclusive. It would, for instance, be interesting to study the differences in form between dative (indirect object) and dative (prepositional) nouns or between dative nouns occurring in clauses with and without direct object nouns. A further analysis of the complementary case-loss between dative adjectives and nouns (cf. pp. 73 - 74) might prove very rewarding. The weak adjectives, too, deserve more attention, especially concerning a possible meaning-distinctive role, (see Hewson, Article and Noun in English - forthcoming).

A comparative analysis of this type on a large scale between English and German would be a possible test of the factors, including syntactic redundancy, that influence case-loss, since modern standard German still possesses case to a great degree, whilst English does not, except for the pronouns, and even here the marking encompasses factors other than case, such as emphasis, which suggests that morphological case is gone altogether in English.

In conclusion it must be said that the redundancy hypothesis has not been altogether successful but has, because of the procedures it entailed, revealed a number of functional processes at work in early English; an attempt has been made to portray language change as a dynamic force rather than as a "moment in time" description of a language that does not reveal any general tendencies that may be operating diachronically in the language.

BIBLIOGRAPHY

- Behaghel, O. (1930) Die deutsche Sprache. Leipzig
- Bernard, G. (1967) "Redondance, Répétition et Récurrence". Études de linguistique appliquée 5. 16 - 39.
- Belfour, A. O. (1962) Twelfth-Century Homilies. Part I. Early English Text Society. Original Series, No. 137.
- Bever, T. G. and Langendoen, D. T. The Interaction of Speech Perception and Grammatical Structure in the Evolution of Language (unpublished).
- Bradley, H. (1968) The Making of English, revised by Simeon Potter. Macmillan.
- Closs, E. (1965) "Diachronic Syntax and Generative Grammar". Language 41. 402 - 415.
- Cockayne, O. (1872) the Liffade of St. Juliana. Early English Text Society. No. 51.
- Dressler, W. (1969) "Die Erhaltung der Redundanz (lateinische Beispiele für ein wenig beachtetes Prinzip der Sprachentwicklung)". Studia Classica Et Orientalia Antonino Pagliaro Oblata 2. 73 - 84.
- Fodor, I. (1965) The Rate of Linguistic Change. The Hague. Mouton & Co.
- Frei, H. (1929) La grammaire des fautes. Paris - Genève - Leipzig.
- Fries, C. C. (1940) "On the Development of the Structural Use of Word-Order in Modern English". Language 16. 199 - 208.
- Halle, M. (1964) "Phonology in Generative Grammar" in The Structure of Language (Readings in the Philosophy of Language). eds. J. A. Fodor/J. J. Katz Prentice-Hall, Inc. Englewood Cliffs, N.J.

- Herzfeld, G. (1900) An Old English Martyrology. Early English Text Society. No. 116.
- Hewson, J. Article and Noun in English. (forthcoming). The Hague. Mouton & Co.
- Hill, A. A. (1959) A review of; "Word-order in the Winchester Manuscript and in William Caxton's Morte Darthur (1485) - a comparison". By Ján Šimko. Halle (Saale). VEB. Max Niemeyer Verlag, 1957 in Language 35, No. 3. 561 - 564.
- Jakobson, R. (1966) "Implications of Language Universals for Linguistics". in Universals of Language. ed. J. H. Greenberg (263 - 278) M.I.T. Press.
- Jespersen, O. (1894) Progress In Language With Special Reference To English. London. Swan Sonnenschein & Co.
- Jespersen, O. (1949) Efficiency in Linguistic Change. København. E. Munksgaard.
- King, R. D. (1969) Historical Linguistics and Generative Grammar. Prentice-Hall, Inc. Englewood Cliffs, N.J.
- Klima, E. S. Studies in Diachronic Transformational Syntax. Unpublished doctoral dissertation, Harvard University.
- Labov, W. (1963) "The Social Motivation of a Sound Change". Word 19. 273 - 309.
- Labov, W. (1966) The Social Stratification of English in New York City. Washington. Center for Applied Linguistics.
- Lehnert, M. (1957) "The Interaction between Form and Function in the Development of the English Language". Zeitschrift für Anglistik und Amerikanistik 5. 43 - 56.

- Malkiel, Y. (1957/58) "Diachronic Hypercharacterization in Romance".
Archivum Linguisticum 9. 79 - 113 / 10. 1 - 36.
- Malkiel, Y. (1968) "The Inflectional Paradigm as an Occasional Determinant
of Sound Change" in Directions for Historical Linguistics. eds. W.P.
Lehmann and Y. Malkiel. Austin. University of Texas Press.
- Marchand, H. (1951) "The Syntactical Change From Inflectional To Word Order
System And Some Effects Of This Change On The Relation 'Verb/Object' In
English. A Diachronic - Synchronic Interpretation". Anglia 70. 70 - 89.
- Martinet, A. (1962) A Functional View of Language. Oxford. Clarendon Press.
- Martinet, A. (1955) Économie des Changements Phonétiques; traité de
phonologie diachronique. Berne. A. Francke.
- Mather, K. (1951) Statistical Analysis in Biology (4th ed.)
London. Methuen & Co.
- McIntock, D.R. (1965) "Morphological Syncretism in Old High German"
Transactions of the Philological Society (1965) 1 - 14.
- Miller, G.A. (1951) Language and Communication 1st ed.
New York. McGraw-Hill
- Moore, S. (1927) "Loss of Final n in Inflectional Syllables of Middle
English". Language 3. 232 - 259.
- Morris, M.C.F. (1892) Yorkshire Folk Talk London. Henry Frowde.
- Morris, R. (1868) Old English Homilies and Homiletic Treatises.
Early English Text Society No. 34.
- Morris, R. (1873) Old English Homilies of the Twelfth Century.
Early English Text Society No. 53.
- Napier, A.S. (1894) History of the Holy Rood-tree. Early English
Text Society, Original Series, No. 103.

- Passy, P. (1891) Étude sur les changements phonétiques et leurs caractères généraux. Paris. Firmin - Didot.
- Paul, H. (1880) Prinzipien der Sprachgeschichte. Halle. Niemeyer 4th ed.
- Postal, P.M. (1968) Aspects of Phonological Theory New York. Harper & Row.
- Samuels, M.L. (1965) "The Role of Functional Selection in the History of English". Transactions of the Philological Society. 15 - 40.
- Sapir, E. (1949) Language, an introduction to the study of speech. New York. Harcourt Brace. (A Harvest Book).
- Shannon, A. (1964) A Descriptive Syntax Of The Parker Manuscript Of The Anglo-Saxon Chronicle From 734 To 891. The Hague. Mouton & Co.
- Shannon, C. (1951) "Prediction and Entropy of Printed English" Bell System Technical Journal. 30. 50 - 65.
- Skeat, W. W. (1881 - 1900) Aelfric's Lives of Saints. Early English Text Society No. 76.
- Sweet, H. (1967) Anglo-Saxon Primer. 9th ed. Revised by N. Davis. Oxford. University Press.
- Sweet, H. (1934) King Alfred's West-Saxon Version of Gregory's Pastoral Care. Early English Text Society. Original Series, No. 45.
- Taali, V. (1958) The Structural Tendencies Of Languages. Vol. I. General Tendencies. Helsinki. Annales Academiæ Scientiarum Fennicæ.

Tervoort, B.T. (1968) "You Me Downtown Movie Fun?" Lingua 21. 455 - 465.

Tesnière, L. (1939) "Phonologie et mélanges de langues"
Travaux du Cercle linguistique de Prague. 8. 83 - 93.

Weinreich, U. (1966) "Explorations in Semantic Theory" in
Current Trends in Linguistics. 3. 395-467.

Ed. T.A. Sebeok. The Hague. Mouton and Co.

Weinreich, U. (1953) Languages in Contact. New York.

Publication of the Linguistic Circle of New York.

